

## Power MOSFETs for Industrial and Consumer

# N-channel Power MOSFETs - 20V to 150V -

Selection guide 2026



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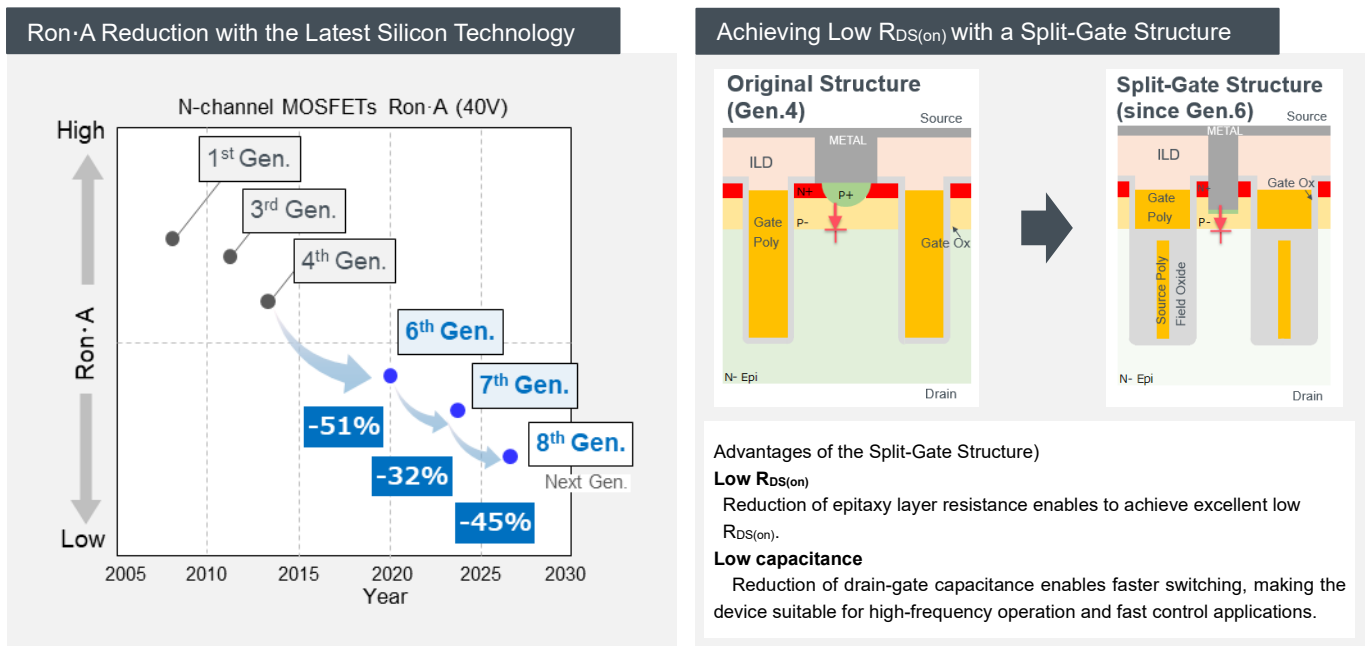
### 1. About ROHM MOSFETs

ROHM's N-channel power MOSFETs offer an extensive portfolio of 20V to 150V MOSFETs, featuring the latest packages ranging from compact packages to high-current packages—making them suitable for a wide range of applications, including power supplies, motor drives, and communication equipment.

### Reduction of On-Resistance

#### Latest Silicon Technology enabling low Ron·A

Leveraging ROHM's proprietary technologies, process scaling has been advanced to significantly improve device performance (Ron·A), enabling higher system efficiency and substantial size reduction of end products.

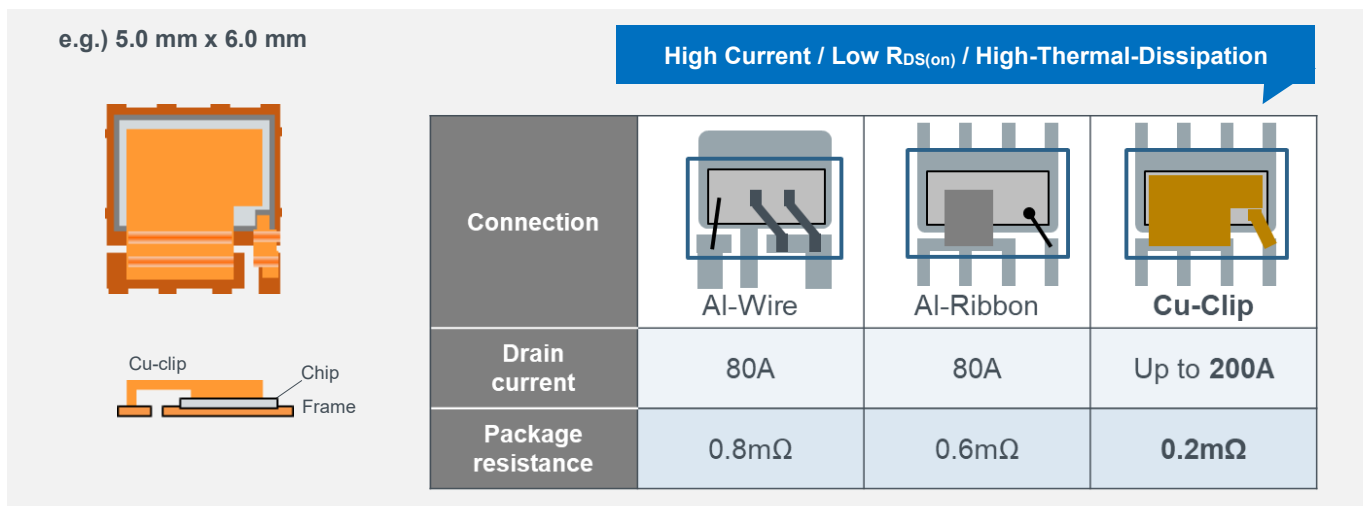


### Cu-Clip Structure in a Compact, High-Thermal-Dissipation Package

Advantage 1. Low on-resistance and high current capability

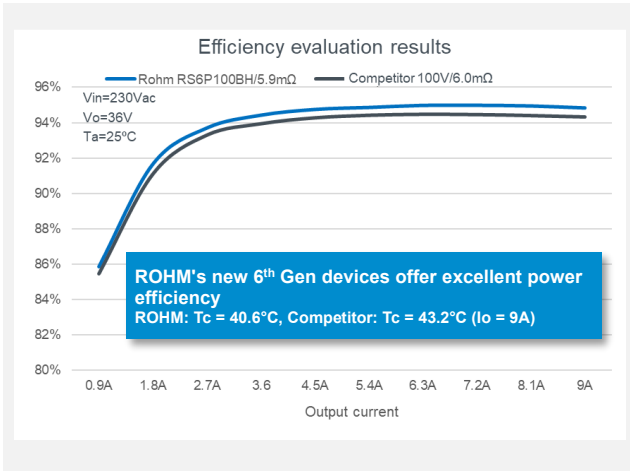
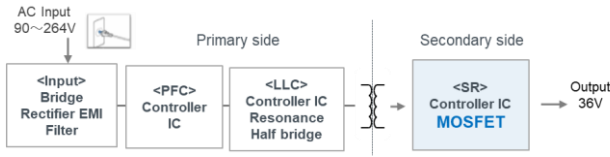
Advantage 2. Low package inductance and high-speed switching

Advantage 3. Excellent thermal performance and improved reliability



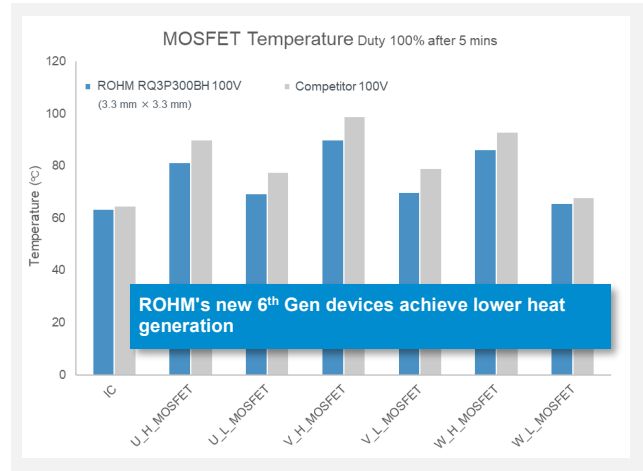
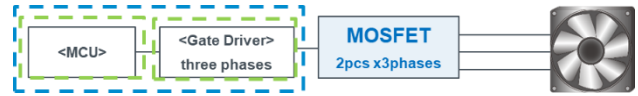
## Improved efficiency in applications

### AC-DC Power Supply for Servers



ROHM's efficiency is 96.0%, while the competitor's efficiency is 95.5%. This results in higher power efficiency compared to competing products. \*Maximum efficiency value.

### Fan Motor Circuit Configuration for 48V Input



### MOSFET Temperature Comparison

The average temperature of ROHM's devices is 75°C, while that of the competitor is 82°C. ROHM's new 6th Gen devices demonstrate superior thermal performance.

## 2. Package Lineup

ROHM is focusing on new package development, offering a wide range of packages that enhance efficiency and density in industrial equipment.

Miniaturization				Power					
3 pins						( ) ROHM package Unit : mm			
	<b>SOT-346T</b> (TSMT3) 2.9×2.8×0.85	<b>TO-252 DPAK</b> (TO-252) 6.6×10.0×2.3	<b>TO-263AB</b> (TO-263AB3LSHYAD) 10.16×15.1×4.57	<b>TO-220FP</b> (TO-220FM) 10.0×29.0×4.5	<b>(TO-220AB)</b> 10.16×29.07×4.44				
6 pins			7 pins						
	<b>SOT-363T</b> (TUMT6) 2.0×2.1×0.77	<b>SOT-457T</b> (TSMT6) 2.9×2.8×0.85		<b>DFN1616-7T</b> (HEML1616L7) 1.6×1.6×0.55					
8 pins									
	<b>DFN2020</b> (HVML2020L8) 2.0×2.0×0.6	<b>(TSMT8)</b> 3.0×2.8×0.8	<b>(HSMT8)</b> 3.3×3.3×0.75	<b>(SOP8)</b> 5.0×6.0×1.75	<b>(HSOP8)</b> 5.0×6.0×1.0	<b>DFN5060-8L</b> (DFN5060T8LSHAAE) 5.0×6.0×1.0	<b>HSOP8</b> (HSN5060R8LSGEA1) 5.2×6.15×1.1	<b>HSOP8-DC</b> (HSN5060W8LTGEA1) 5.2×6.15×0.75	<b>DFN8080-8L</b> (DFN8080T8LSHAA1) 8.0×8.0×1.0
9 pins									
	<b>DFN3333-9DC</b> (HSML3333L9) 3.3×3.3×0.75	<b>DFN3333-9L</b> (Source-Down) 3.3×3.3×1.0	<b>DFN3333-9L DSC</b> (Source-Down Double-side cooling) 3.3×3.3×0.65	<b>(HSOP8)</b> 5.0×6.0×1.0	<b>TOLL</b> (TOLL-9LSATAC) 9.9×11.68×2.3				
10 pins									
	<b>(HSML3030L10)</b> 3.0×3.0×0.6								

### 3. New Product Introduction

#### Wide-SOA (Safe Operating Area)

ROHM's Wide-SOA products achieve both wide SOA (conditions:  $V_{DS} = 48V$ ,  $P_w = 1ms / 10ms$ ) and low  $R_{DS(on)}$ . This enables high product reliability during hot-swap operations (power insertion while the system is powered on), while optimizing power efficiency and reducing power consumption and heat generation.

#### Benefits

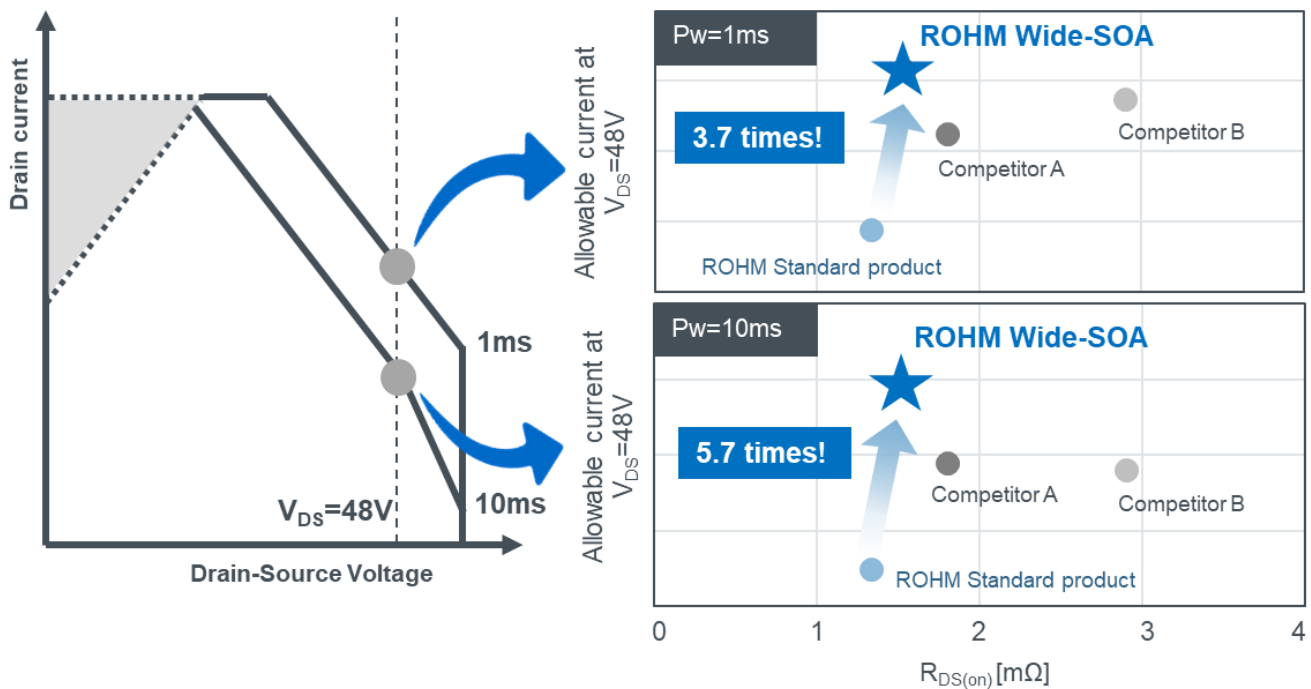
- Wide SOA → Improved inrush current management
- Low  $R_{DS(on)}$  → Improved system efficiency
- Compact / High-thermal-dissipation package → Enables stable operation



#### Applications

- 48V AI server systems and power supply hot-swap circuits, ORing
- 48V industrial equipment power systems (e.g. forklifts, power tools, robots, fan motors)
- AGVs (Automated Guided Vehicles), UPS and emergency power systems

#### Achieves wide SOA for both 1ms and 10ms pulse widths!



#### Products

Package	Part Number	$V_{DSS}$ (V)	$I_D$ (A)	$R_{DS(on)}$ Max (mΩ)		$Q_g$ (nC) Typ.	$C_{iss}$ (pF) Typ.	Drain current tolerance of SOA $V_{DS}=48V$ (A)	
				$V_{GS}=10V$	$V_{GS}=10V$			$P_w=10ms$	$P_w=1ms$
DFN8080-8L	<a href="#">RY7P250BM</a>	100	300	1.86	170	11300	16	50	
TOLL	RJ2P17BBM*	100	290	2.2	165	11300	15.3	41	
DFN5060-8L	<a href="#">RS7P200BM</a>	100	200	4.0	72	5550	7.5	25	

\*: Under development (specifications subject to change).

### Source-Down Structure

In ROHM's source-down structure, the drain electrode—traditionally connected to the thermal pad in a drain-down configuration—is repositioned by flipping the chip upside down inside the package, allowing the source electrode to be directly connected to the thermal pad.

By combining this structure with a DFN package, a larger chip can be mounted, enabling lower  $R_{DS(on)}$ .

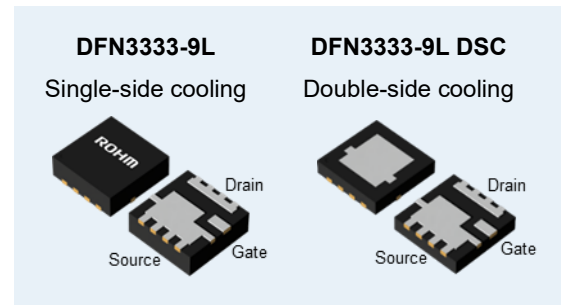
In addition, the double-side cooling package provides excellent thermal performance, contributing to higher power density and improved performance in power supply circuits.

### Benefits

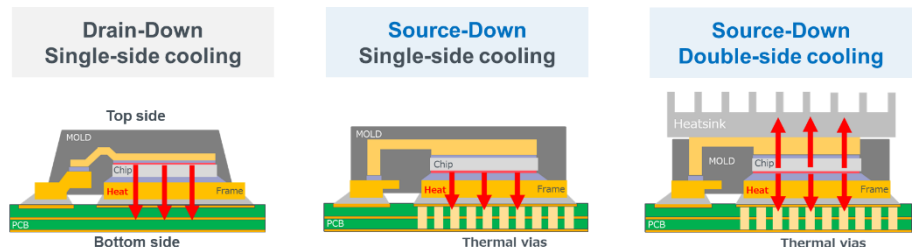
- Low  $R_{DS(on)}$  in a small package
- Superior  $R_{th(j-c)}$  thermal performance
- Noise reduction through layout optimization

### Applications

Drives, server, battery management, motor, power supply

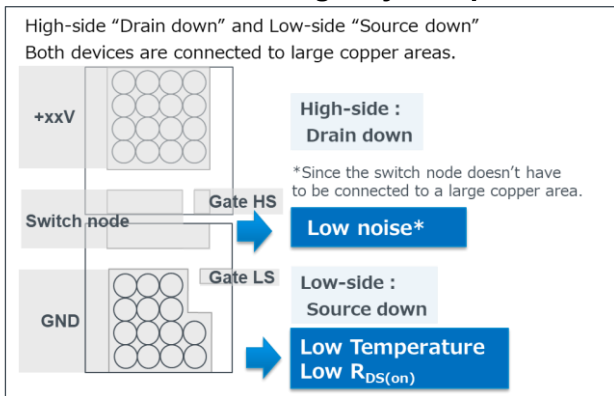


### High thermal dissipation

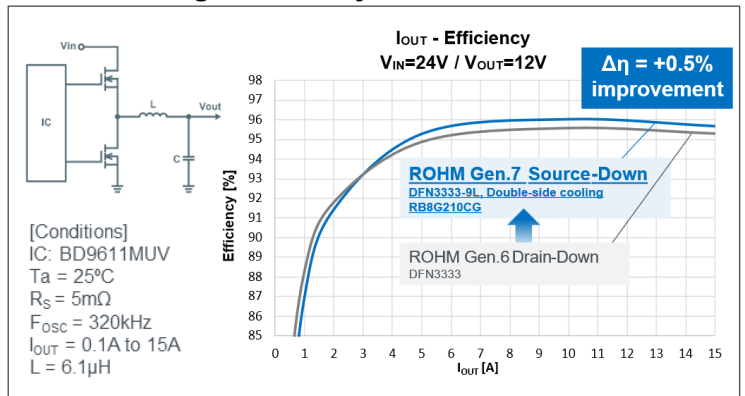


Thermal Resistance $\Theta_{jc}$ (Top side)	28.0 K/W	25.0 K/W	95% Reduction $\Rightarrow$ 1.3 K/W
Thermal Resistance $\Theta_{jc}$ (Bottom side)	1.6 K/W	1.5 K/W	1.5 K/W

### Noise reduction through layout optimization



### Achieves high efficiency



### Products

Size	Part Number		$V_{DSS}$ (V)	$I_D$ (A) $T_c=25^\circ\text{C}$	$P_D$ (W) $T_c=25^\circ\text{C}$	$R_{DS(on)}$ Max (m $\Omega$ )			
	Single-side cooling ( $t=1.0\text{mm}$ )	Double-side cooling ( $t=0.65\text{mm}$ )				$V_{GS}=10\text{V}$	$V_{GS}=8\text{V}$	$V_{GS}=6\text{V}$	$V_{GS}=4.5\text{V}$
3.3mm x 3.3mm	RH8G210CG*	RB8G210CG*	40	210	107	1.37	-	-	2.69
	RH8G205CH*	RB8G205CH*		205	107	1.42	-	2.90	-
	RH8L130CG*	RB8L130CG*	60	130	107	3.8	-	-	7.2
	RH8L130CH*	RB8L130CH*		130	107	3.9	-	7.0	-
	RH8N105BG*	RB8N105BG*	80	105	107	5.0	-	-	8.2
	RH8N105BH*	RB8N105BH*		105	107	5.5	-	9.1	-
	RH8P085CH*	RB8P085CH*	100	85	107	7.3	9.6	-	-
	RH8R045CH*	RB8R045CH*	150	45	107	26	34	-	-

\*: Under development (specifications subject to change).

### High ESD tolerance

ROHM's ESD-protected MOSFETs (ESD HBM Class 1B) provide robust protection against electrostatic discharge, ensuring reliable operation in sensitive environments. Ideal for single-phase and three-phase brushless motors requiring high ESD robustness.

Available in bottom-side cooling packages for excellent heat dissipation. Additionally, dual MOSFETs reduce mounting area and component count, enabling further miniaturization and weight reduction of circuit designs.

### Benefits

- High ESD tolerance: 800V guarantee (HBM/ Human body model) (Compliant with JEDEC JS-001-2023)
- High-thermal-dissipation symmetrical bottom-side cooling design
- Able to reduce mounting area and number of components compared to use of two single type MOSFETs .

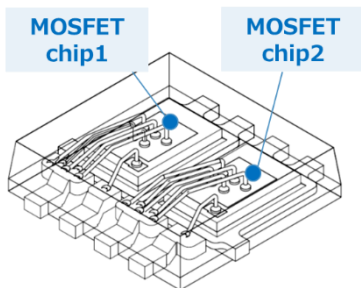


### Applications

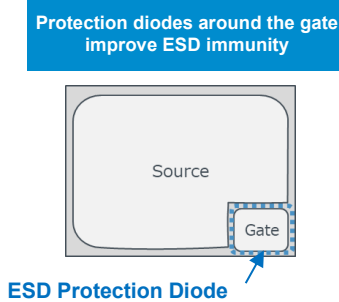
Motor application, 48V industrial power supply

### Built-in ESD Protection Diode

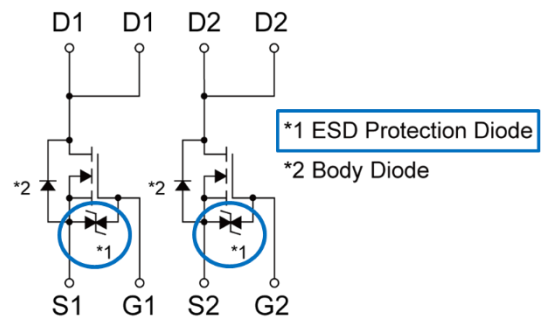
Internal structure



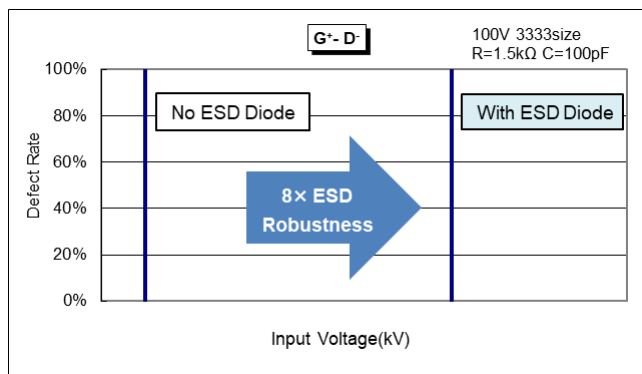
Top view of chip



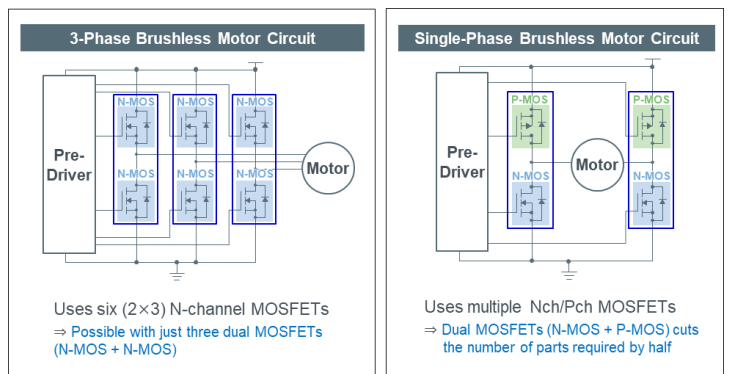
Inner circuit



### 800V Rating Ensures High Reliability



### Smaller Footprint & Fewer Components



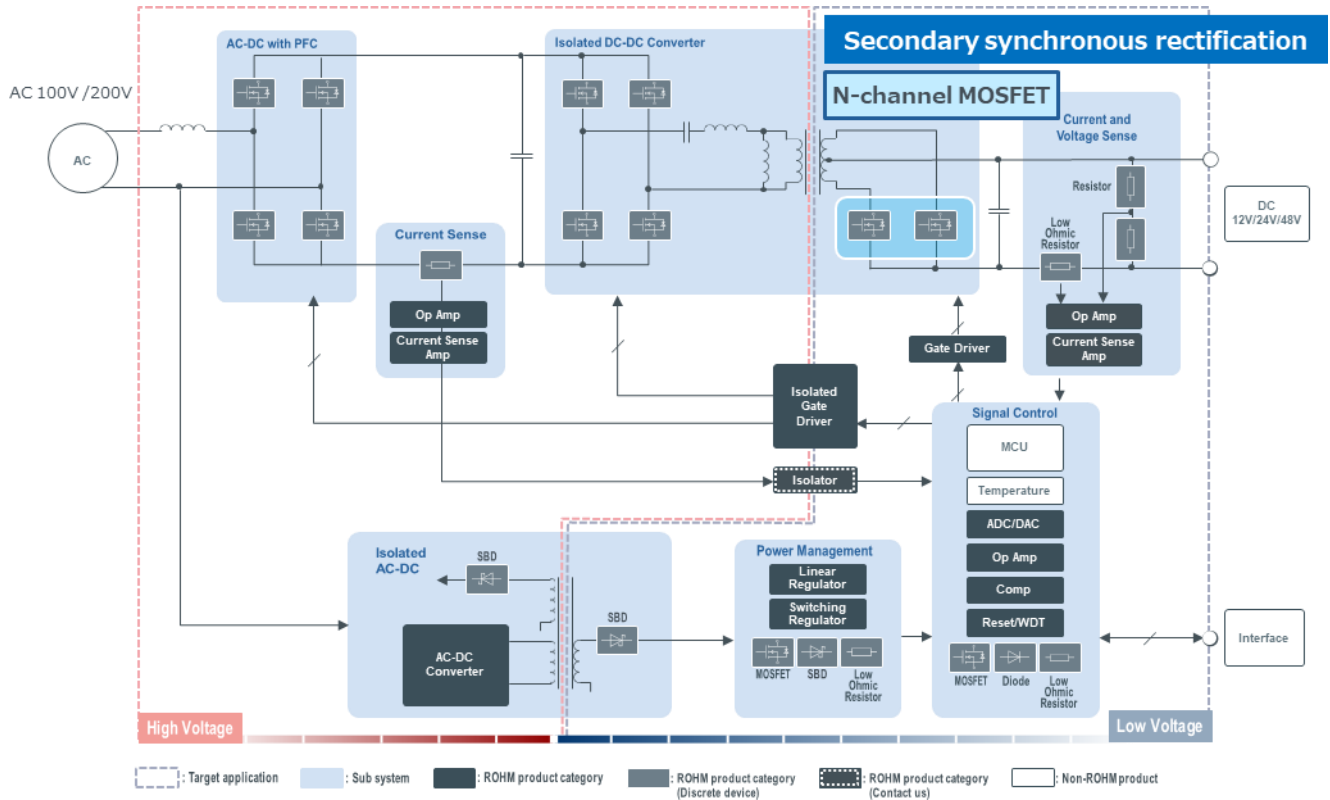
### Products

Package	Polarity	Part Number	V <sub>DSS</sub> (V)	I <sub>D</sub> (A) T <sub>C</sub> =25°C	P <sub>D</sub> (W) T <sub>C</sub> =25°C	R <sub>DS(on)</sub> Max (mΩ)			ESD (HBM)
						V <sub>GS</sub> =10V	V <sub>GS</sub> =6V	V <sub>GS</sub> =4.5V	
HSMT8 3.3 x 3.3 x 0.75mm	N-ch ×2	HT8KE6D*	100	12.5	14	60	88	-	800V
HSOP8 5.0 x 6.0 x 1.0mm	N-ch ×2	HP8KC5D*	60	12	20	90	-	139	
	N	HP8MC5D*	60	12	20	90	-	139	
	P		-60	-12		96	-	107	

\*: Under development (specifications subject to change).

4. Recommended N-channel MOSFETs by Application

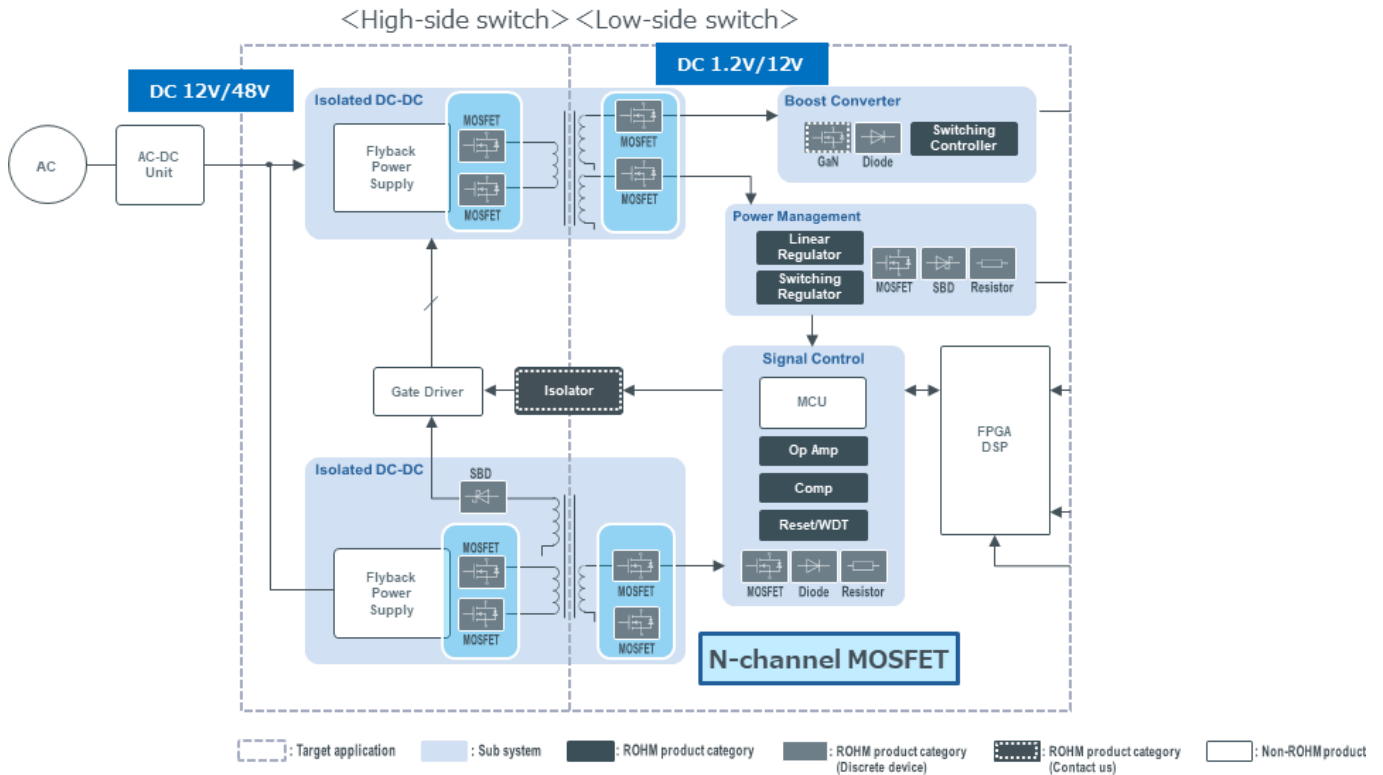
Server / Industrial AC/DC converter




Recommended N-channel MOSFETs									
Secondary synchronous rectification									
Battery Voltage	Part Number	$V_{DSS}$ (V)	$I_D$ (A) Silicon limit	$R_{DS(on)}$ max. $V_{GS}=10V$ (m $\Omega$ )	$Q_g$ $V_{GS}=4.5V, 6V^*, 8V^{**}$	$V_{GS(th)}$	$C_{iss}$ Typ.	$C_{oss}$ Typ.	Size (mm)
12V system	<a href="#">RS7E200BG</a>	30	390	0.67	60	1.0 — 2.5	9500	4390	5.0 x 6.0 x 1.0
	<a href="#">RS7G200CG</a>	40	410	0.64	63	1.0 — 2.5	9150	3770	
	<a href="#">RS6L120BG</a>	60	150	2.7	25	1.0 — 2.5	3520	820	
24V system	<a href="#">RS7G200CG</a>	40	410	0.64	63	1.0 — 2.5	9150	3770	DFN5060-8L (RS7xxxxxx)
	<a href="#">RS6G120BG</a>	40	210	1.34	34	1.0 — 2.5	4240	1950	
	<a href="#">RS6L120BG</a>	60	150	2.7	25	1.0 — 2.5	3520	820	
48V system	<a href="#">RS7N200BH</a>	80	230	2.0	45*	2.0 — 4.0	6550	1440	HSOP8 (RS6xxxxxx)
	<a href="#">RS6N120BH</a>	80	135	3.3	33*	2.0 — 4.0	3420	1020	
	<a href="#">RS7P150BH</a>	100	150*	3.8	47*	2.0 — 4.0	4740	960	
	<a href="#">RS7R125CH</a>	150	125*	8.3	40**	2.0 — 4.0	3000	410	
	<a href="#">RS6R060BH</a>	150	60*	21.8	30*	2.0 — 4.0	2750	260	

\*Tc=25°C

Server / DC/DC power module for communication equipment

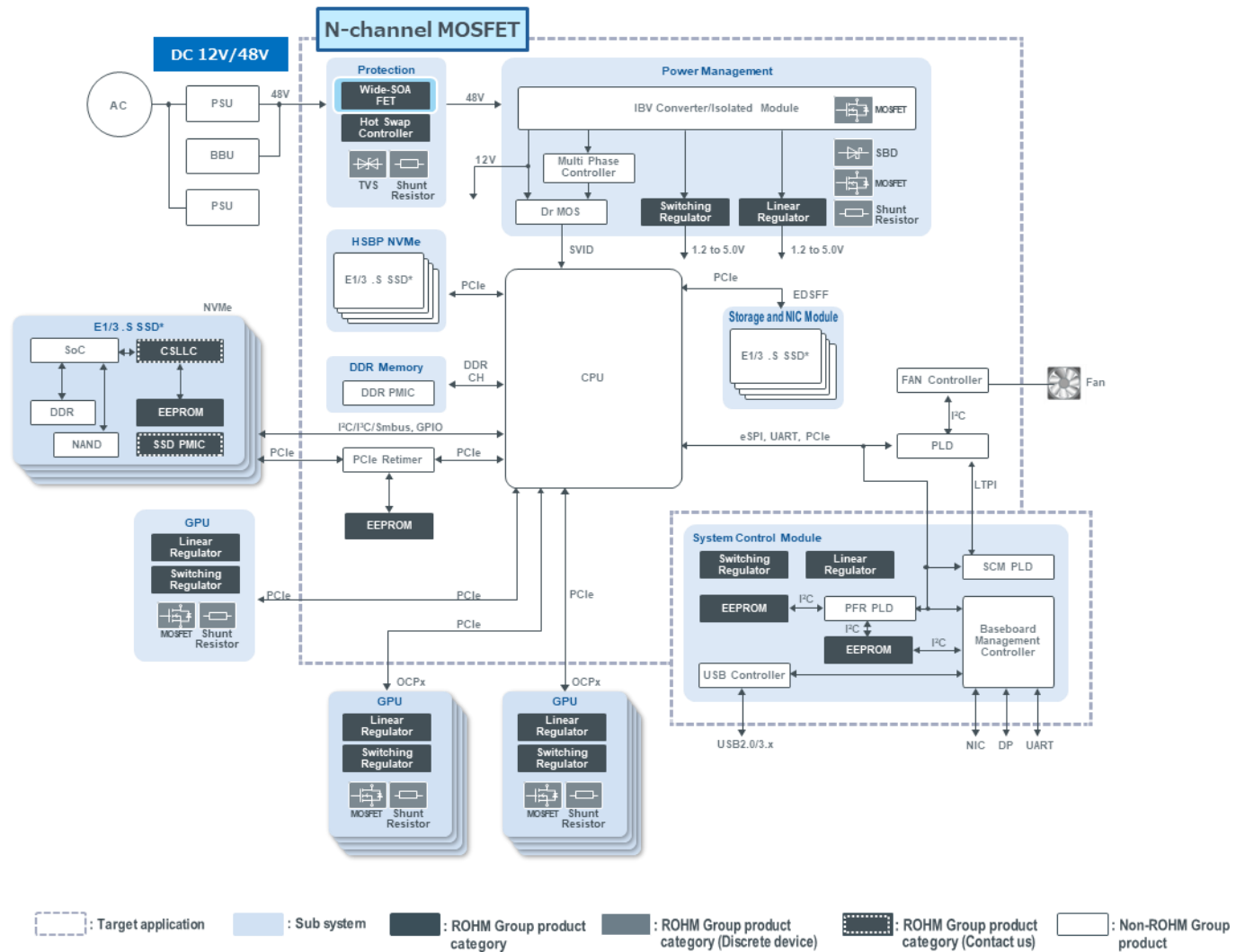


Recommended N-channel MOSFETs										
DC/DC converter										
Input/ Output Voltage	Circuit	Part Number	V <sub>DSS</sub> (V)	I <sub>D</sub> (A) Silicon limit	R <sub>DS(on)</sub> max. V <sub>GS</sub> =10V (mΩ)	Q <sub>g</sub> V <sub>GS</sub> =4.5V V <sub>GS</sub> =6V*	V <sub>GS(th)</sub>	C <sub>iss</sub> Typ.	C <sub>oss</sub> Typ.	Size (mm)
12Vin 1.2Vout	High-Side Switch	<a href="#">RH6G040CG</a>	40V	135	2.4	14.5	1.0 — 2.5	1910	1300	3.3 x 3.3 x 0.75  HSMT8 
		<a href="#">RH6L040CH</a>	60V	85	5.8	11.4*	2.0 — 4.0	1390	310	
	Low-Side Switch	<a href="#">RH6E040BG</a>	30V	125	2.9	14.0	1.0 — 2.5	2300	950	
		<a href="#">RH6G040CG</a>	40V	135	2.4	14.5	1.0 — 2.5	1910	1300	
48Vin 12Vout	High-Side Switch	<a href="#">RH6N040BH</a>	80V	65	8.3	14.5*	2.0 — 4.0	1530	325	
		<a href="#">RH6P040BH</a>	100V	40*	15.6	10.9*	2.0 — 4.0	1080	205	
		<a href="#">RH6R025BH</a>	150V	25*	60	11.0*	2.0 — 4.0	1010	95	
	Low-Side Switch	<a href="#">RH6G040CG</a>	40V	135	2.4	14.5	1.0 — 2.5	1910	1300	
		<a href="#">RH6L040BG</a>	60V	65	7.1	9.2	1.0 — 2.5	1320	305	
		<a href="#">RH6N040BH</a>	80V	65	8.3	14.5*	2.0 — 4.0	1530	325	
		<a href="#">RH6P040BH</a>	100V	40*	15.6	10.9*	2.0 — 4.0	1080	205	

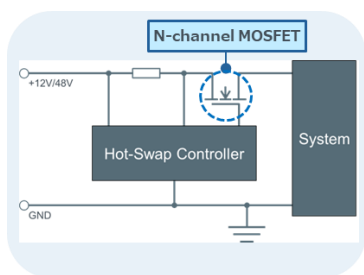
\*Tc=25°C



Hot-Swap Controller for Servers



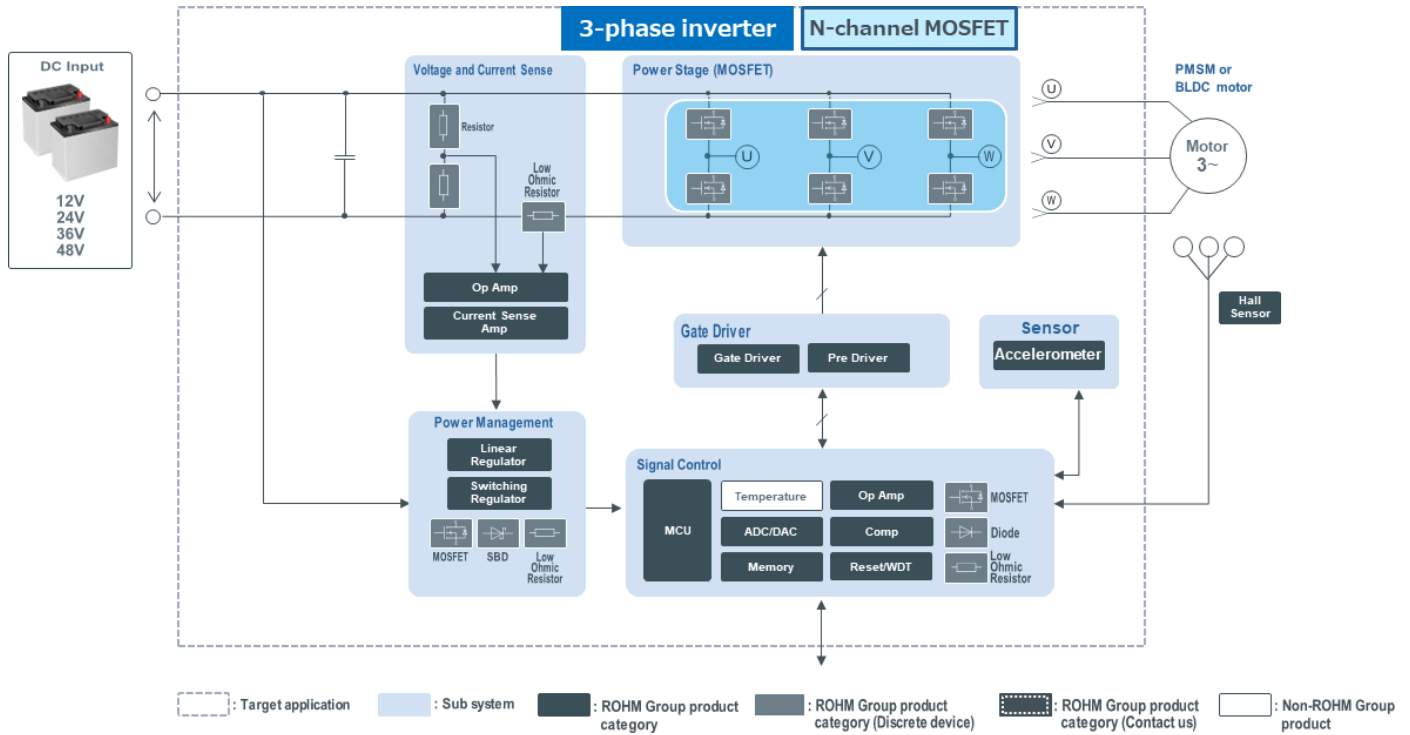
Hot-Swap Controller Circuit Diagram:



Recommended N-channel MOSFETs								
Hot-swap controller								
Battery Voltage	Part Number	V <sub>DSS</sub> (V)	I <sub>D</sub> (A) Silicon limit *T <sub>c</sub> =25°C	R <sub>DS(on)</sub> max. V <sub>GS</sub> =10V (mΩ)	SOA V <sub>DS</sub> =12V*,48V (A)		Package	Size (mm)
					Pw=10ms	Pw=1ms		
12V system	<a href="#">RS7E200BG</a>	30	390	0.67	25*	70*	DFN5060-8L	5.0 x 6.0 x 1.0
48V system	<a href="#">RY7P250BM</a>	100	300	1.86	16	50	DFN8080-8L	8.0 x 8.0 x 1.0
	RJ2P17BBM*	100	290	2.2	15.3	41	TOLL	9.9 x 11.68 x 2.3
	<a href="#">RS7P200BM</a>	100	200*	4.0	7.5	25	DFN5060-8L	5.0 x 6.0 x 1.0

Part Number\*: Under development (specifications subject to change)

Industrial Motor Drive: 12–48V DC



Recommended N-channel MOSFETs							
Three-phase inverter							
Input Voltage	Type	Part Number	V <sub>DSS</sub> (V)	I <sub>D</sub> (A) T <sub>c</sub> =25°C	R <sub>DS(on)</sub> max. V <sub>GS</sub> =10V (mΩ)	Package	Size (mm)
12Vin	Single	<a href="#">RS7E200BG</a>	30	390*	0.67	DFN5060-8L	5.0 x 6.0 x 1.0
	Dual (N-ch x2)	<a href="#">HT8KA6</a>	30	15	10.9	HSMT8	3.3 x 3.3 x 0.75
	Single	RB8G210CG*	40	210*	1.37	DFN3333-9L DSC	3.3 x 3.3 x 0.65
	Dual (N-ch x2)	<a href="#">HT8KB6</a>	40	15	17.2	HSMT8	3.3 x 3.3 x 0.75
24Vin	Single	<a href="#">RS7G200CG</a>	40	410*	0.64	DFN5060-8L	5.0 x 6.0 x 1.0
	Dual (N-ch x2)	<a href="#">HP8KB7</a>	40	24	8.0	HSOP8	5.0 x 6.0 x 1.0
	Single	<a href="#">RH6L040CG</a>	60	90*	5.6	HSMT8	3.3 x 3.3 x 0.75
	Dual (N-ch x2)	<a href="#">HT8KC6</a>	60	15	29	HSMT8	3.3 x 3.3 x 0.75
36Vin	Single	<a href="#">RS7L200CG</a>	60	275*	1.39	DFN5060-8L	5.0 x 6.0 x 1.0
	Dual (N-ch x2)	<a href="#">HP8KC7</a>	60	24	11.5	HSOP8	5.0 x 6.0 x 1.0
	Single	<a href="#">RS7N200BH</a>	80	230*	2.0	DFN5060-8L	5.0 x 6.0 x 1.0
	Dual (N-ch x2)	HP8KD6H*	80	18	32	HSOP8	5.0 x 6.0 x 1.0
48Vin	Single	<a href="#">RS7P150BH</a>	100	150	3.8	DFN5060-8L	5.0 x 6.0 x 1.0
	Dual (N-ch x2)	<a href="#">HP8KE7</a>	100	24	19.6	HSOP8	5.0 x 6.0 x 1.0
	Single	<a href="#">RS7R125CH</a>	150	125	8.3	DFN5060-8L	5.0 x 6.0 x 1.0
	Dual (N-ch x2)	<a href="#">HP8KF7H</a>	150	18.5	62	HSOP8	5.0 x 6.0 x 1.0

Part Number\*: Under development (specifications subject to change)

\*Silicon limit

## N-channel MOSFET Application



Industrial Drives, Base Station, Motor control, AGV, Server Board, Notebook, Consumer, Battery, Onboard



### 5. Single type products

(Ta=25°C, unless otherwise specified) Lineup table: sorted in ascending order based on R<sub>DS(on)</sub> value

#### Single (V<sub>DSS</sub>=20V)











Pin	6pin	8pin
(mm)	2.9x2.8x0.85	3.0x2.8x0.8
Package	TSMT6	TSMT8
V <sub>DSS</sub>		
20V	<a href="#">RQ6C050UN</a> 5.0A, <b>30mΩ</b> 1.5V drive Gen.1	RQ7C075UN 7.5A, <b>16mΩ</b> 1.5V drive Gen.1
		RQ7C065UN 6.5A, <b>22mΩ</b> 1.5V drive Gen.1

R<sub>DS(on)</sub> max at V<sub>GS</sub>=4.5V

Part No.: Under development (No link. Specifications subject to change.)

Single (V<sub>DSS</sub>=30V)

The data is sorted in ascending order of R<sub>DS(on)</sub>.

Pin	7pin	8pin	6pin	3pin	6pin	8pin	8pin	8pin	8pin	8pin
(mm)	1.6x1.6	2.0x2.0	2.0x2.1	2.9x2.8	2.9x2.8	3.0x2.8	3.3x3.3	5.0x6.0	5.0x6.0	5.0x6.0
Package	HEML1616L7	HUML2020L8	TUMT6	TSMT3	TSMT6	TSMT8	HSMT8	SOP8	HSOP8	DFN5060-8L
V <sub>DSS</sub>										
2.5V drive	<a href="#">RW4E075AJ</a> 7.5A, 26mΩ 2.5V drive Gen.5	<a href="#">RF4E100AJ</a> 10A, 12.4mΩ 2.5V drive Gen.5	<a href="#">RF6E045AJ</a> 4.5A, 23.7mΩ 2.5 drive Gen.5	<a href="#">RQ5E065AJ</a> 6.5A, 18.1mΩ 2.5V drive Gen.5	<a href="#">RQ6E080AJ</a> 8A, 16.5mΩ 2.5V drive Gen.5	<a href="#">RQ7E110AJ</a> 11A, 9mΩ 2.5V drive Gen.5	<a href="#">RQ3E180AJ</a> 30A**, 4.5mΩ 2.5V drive Gen.5	<a href="#">RS3E135BN</a> 13.5A, 7.4mΩ 4.5V drive Gen.4	<a href="#">RS6E120BG</a> 270A*, 1.1mΩ 4.5V drive Gen.6	<a href="#">RS7E200BG</a> 390A*, 0.67mΩ 4.5V drive Gen.6
	<a href="#">RW4E045AJ</a> 4.5A, 40mΩ 2.5V drive Gen.5	<a href="#">RF4E060AJ</a> 6A, 37mΩ 2.5V drive Gen.5	<a href="#">RF6E065BN</a> 6.5A, 15.3mΩ 4.5V drive Gen.4	<a href="#">RQ5E040AJ</a> 4A, 37mΩ 2.5V drive Gen.5	<a href="#">RQ6E050AJ</a> 5A, 35mΩ 2.5V drive Gen.5	<a href="#">RQ7E100XN</a> 10A, 10.5mΩ 4V drive Gen.3	<a href="#">RQ3E110AJ</a> 24A**, 11.7mΩ 2.5V drive Gen.5	<a href="#">RXH125N03</a> 12.5A, 12mΩ 4V drive Gen.3	<a href="#">RS1E350BN</a> 80A**, 1.7mΩ 4.5V drive Gen.4	
	<a href="#">RW4E065GN</a> 6.5A, 22.5mΩ 4.5V drive Gen.4	<a href="#">RF4E110BN</a> 11A, 11.1mΩ 4.5V drive Gen.4		<a href="#">RQ5E040TN</a> 4A, 48mΩ 2.5V drive Gen.1	<a href="#">RQ6E045TN</a> 4.5A, 43mΩ 2.5V drive Gen.1	<a href="#">RQ7E075XN</a> 7.5A, 17mΩ 4V drive Gen.3	<a href="#">RH6E040BG</a> 125A*, 2.9mΩ 4.5V drive Gen.6	<a href="#">RXH100N03</a> 10A, 13mΩ 4V drive Gen.3	<a href="#">RS1E350GN</a> 80A**, 1.76mΩ 4.5V drive Gen.4	
		<a href="#">RF4E110GN</a> 11A, 11.3mΩ 4.5V drive Gen.4		<a href="#">RQ5E030AJ</a> 3A, 75mΩ 2.5V drive Gen.5	<a href="#">RQ6E035TN</a> 3.5A, 54mΩ 2.5V drive Gen.1		<a href="#">RQ3E180BN</a> 39A**, 3.9mΩ 4.5V drive Gen.4	<a href="#">RS3E095BN</a> 9.5A, 14.6mΩ 4.5V drive Gen.4	<a href="#">RS1E321GN</a> 80A**, 2.1mΩ 4.5V drive Gen.4	
		<a href="#">RF4E080BN</a> 8A, 17.6mΩ 4.5V drive Gen.4		<a href="#">RQ5E025TN</a> 2.5A, 92mΩ 2.5V drive Gen.1	<a href="#">RQ6E085BN</a> 8.5A, 14.4mΩ 4.5V drive Gen.4		<a href="#">RQ3E180GN</a> 39A**, 4.3mΩ 4.5V drive Gen.4	<a href="#">RXH090N03</a> 9A, 17mΩ 4V drive Gen.3	<a href="#">RS6E122BG</a> 155A*, 2.16mΩ 4.5V drive Gen.6	
		<a href="#">RF4E080GN</a> 8A, 17.6mΩ 4.5V drive Gen.4		<a href="#">RQ5E070BN</a> 7A, 16.1mΩ 4.5V drive Gen.4	<a href="#">RQ6E055BN</a> 5.5A, 25mΩ 4.5V drive Gen.4		<a href="#">RQ3E160AD</a> 16A, 4.5mΩ 4.5V drive Gen.4	<a href="#">RXH070N03</a> 7A, 28mΩ 4V drive Gen.3	<a href="#">RS1E301GN</a> 80A**, 2.2mΩ 4.5V drive Gen.4	
		<a href="#">RF4E070GN</a> 7A, 21.4mΩ 4.5V drive Gen.4		<a href="#">RQ5E035BN</a> 3.5A, 37mΩ 4.5V drive Gen.4	<a href="#">RQ6E045BN</a> 4.5A, 30mΩ 4.5V drive Gen.4		<a href="#">RQ3E150BN</a> 39A**, 5.3mΩ 4.5V drive Gen.4		<a href="#">RS1E280BN</a> 80A**, 2.3mΩ 4.5V drive Gen.4	
		<a href="#">RF4E070BN</a> 7A, 28.6mΩ 4.5V drive Gen.4		<a href="#">RQ5E035XN</a> 3.5A, 50mΩ 4V drive Gen.3	<a href="#">RQ6E045SN</a> 4.5A, 38mΩ 4V drive Gen.1		<a href="#">RQ3E130BN</a> 39A**, 6mΩ 4.5V drive Gen.4		<a href="#">RS1E281BN</a> 80A**, 2.3mΩ 4.5V drive Gen.4	
				<a href="#">RQ5E025SN</a> 2.5A, 70mΩ 4V drive Gen.1	<a href="#">RQ6E040XN</a> 4.0A, 50mΩ 4V drive Gen.3		<a href="#">RQ3E150GN</a> 39A**, 6.1mΩ 4.5V drive Gen.4		<a href="#">RS1E280GN</a> 80A**, 2.6mΩ 4.5V drive Gen.4	
							<a href="#">RQ3E120GN</a> 27A**, 8.8mΩ 4.5V drive Gen.4		<a href="#">RS1E240BN</a> 40A**, 3.2mΩ 4.5V drive Gen.4	
30V						<a href="#">RQ3E120BN</a> 21A**, 9.3mΩ 4.5V drive Gen.4		<a href="#">RS1E240GN</a> 72A**, 3.3mΩ 4.5V drive Gen.4		
						<a href="#">RQ3E100BN</a> 21A**, 10.4mΩ 4.5V drive Gen.4		<a href="#">RS1E200BN</a> 68A**, 3.9mΩ 4.5V drive Gen.4		
						<a href="#">RQ3E100GN</a> 21A**, 11.7mΩ 4.5V drive Gen.4		<a href="#">RS1E200GN</a> 57A**, 4.6mΩ 4.5V drive Gen.4		
						<a href="#">RQ3E080BN</a> 15A**, 15.2mΩ 4.5V drive Gen.4		<a href="#">RS1E180BN</a> 60A**, 4.9mΩ 4.5V drive Gen.4		
						<a href="#">RQ3E080GN</a> 18A**, 16.7mΩ 4.5V drive Gen.4		<a href="#">RS1E170GN</a> 40A**, 6.7mΩ 4.5V drive Gen.4		
						<a href="#">RQ3E070BN</a> 15A**, 27mΩ 4.5V drive Gen.4		<a href="#">RS1E150GN</a> 40A**, 8.8mΩ 4.5V drive Gen.4		
								<a href="#">RS1E130GN</a> 35A**, 11.7mΩ 4.5V drive Gen.4		

R<sub>DS(on)</sub> max at V<sub>GS</sub>=4.5V (2.5V drive)















R<sub>DS(on)</sub> max at V<sub>GS</sub>=10V (4V, 4.5V drive)

Note) \*IDSL(A)\_Silicon limit, \*\*T<sub>c</sub>=25°C

Part No.: Under development (No link. Specifications subject to change.)

Single ( $V_{DSS}=40V$ )

The data is sorted in ascending order of  $R_{DS(on)}$ .

Pin	8pin	6pin	3pin	8pin	8pin	9pin	9pin
(mm)	2.0x2.0x0.6	2.0x2.1x0.77	2.9x2.8x0.85	3.0x2.8x0.8	3.3x3.3x0.75	3.3x3.3x1.0	3.3x3.3x0.65
Package	HUML2020L8	TUMT6	TSMT3	TSMT8	HSMT8	DFN3333-9L	DFN3333-9L DSC
$V_{DSS}$							
40V	<a href="#">RF4G100BG</a> 10A, <b>14.2mΩ</b> 4.5V drive Gen.6	<a href="#">RF6G035BG</a> 3.5A, <b>46mΩ</b> 4.5V drive Gen.6	<a href="#">RQ5G060BG</a> 6.0A, <b>20.6mΩ</b> 4.5V drive Gen.6	<a href="#">RQ7G080BG</a> 8.0A, <b>16.5mΩ</b> 4.5V drive Gen.6	<a href="#">RH6G040CG</a> 135A*, <b>2.4mΩ</b> 4.5V drive Gen.7	RH8G210CG 210A*, <b>1.37mΩ</b> 4.5V drive Gen.7	RB8G210CG 210A*, <b>1.37mΩ</b> 4.5V drive Gen.7
					<a href="#">RH6G040CH</a> 135A*, <b>2.5mΩ</b> 6V drive Gen.7	RH8G205CH 205A*, <b>1.42mΩ</b> 6V drive Gen.7	RB8G205CH 205A*, <b>1.42mΩ</b> 6V drive Gen.7
					<a href="#">RH6G040BG</a> 95A*, <b>3.6mΩ</b> 4.5V drive Gen.6		
40V	8pin 5.0x6.0x1.0 HSOP8 	8pin 5.0x6.0x1.0 DFN5060-8L 	8pin 8.0x8.0x1.0 DFN8080-8L 	3pin 6.6x10.0x2.3 TO-252 	3pin 10.16x15.1x4.57 TO-263AB 	3pin 10.0x29.0x4.7 TO-220FP 	3pin 10.16x29.07x4.44 TO-220AB 
	<a href="#">RS6G120CG</a> 300A*, <b>0.9mΩ</b> 4.5V drive Gen.7	<a href="#">RS7G200CG</a> 410A*, <b>0.64mΩ</b> 4.5V drive Gen.7	RY7G250CG 790A*, <b>0.27mΩ</b> 4.5V drive Gen.7	<a href="#">RD3G07BBG</a> 150A*, <b>2.3mΩ</b> 4.5V drive Gen.6	<a href="#">RJ1G10BBG</a> 280A*, <b>1.43mΩ</b> 4.5V drive Gen.6	<a href="#">RX2G10BBG</a> 205A*, <b>1.47mΩ</b> 4.5V drive Gen.6	<a href="#">RX3G18BBG</a> 270A*, <b>1.47mΩ</b> 4.5V drive Gen.6
	<a href="#">RS6G120CH</a> 300A*, <b>0.91mΩ</b> 6V drive Gen.7	<a href="#">RS7G200CH</a> 445A*, <b>0.65mΩ</b> 6V drive Gen.7	RY7G250CH 775A*, <b>0.28mΩ</b> 6V drive Gen.7	<a href="#">RD3G03BBG</a> 65A*, <b>6.5mΩ</b> 4.5V drive Gen.6	<a href="#">RJ1G04BBG</a> 130A*, <b>3.1mΩ</b> 4.5V drive Gen.6	<a href="#">RX2G07BBG</a> 100A*, <b>3.0mΩ</b> 4.5V drive Gen.6	<a href="#">RX3G07BBG</a> 130A*, <b>3.0mΩ</b> 4.5V drive Gen.6
	<a href="#">RS6G122CG</a> 225A*, <b>1.19mΩ</b> 4.5V drive Gen.7						
	<a href="#">RS6G122CH</a> 225A*, <b>1.2mΩ</b> 6V drive Gen.7						
	<a href="#">RS6G120BG</a> 210A*, <b>1.34mΩ</b> 4.5V drive Gen.6						
	<a href="#">RS6G120BH</a> 210A*, <b>1.38mΩ</b> 6V drive Gen.6						
	RS6G090CG 90A**, <b>3.1mΩ</b> 4.5V drive Gen.7						
	<a href="#">RS6G100BG</a> 100A**, <b>3.4mΩ</b> 4.5V drive Gen.6						
	<a href="#">RS1G120MN</a> 34A**, <b>16.2mΩ</b> 4.5V drive Gen.3						




$R_{DS(on)}$  max at  $V_{GS}=10V$

Note) \*IDSL(A)\_Silicon limit, \*\*Tc=25°C

Part No.: Under development (No link. Specifications subject to change.)

Single ( $V_{DS}=45V$ )

The data is sorted in ascending order of  $R_{DS(on)}$ .



















Pin	3pin	8pin	3pin
(mm)	2.9x2.8x0.85	5.0x6.0x1.75	6.6x10.0x2.3
Package	TSMT3	SOP8	TO-252
$V_{DSS}$			
2.5V drive	<a href="#">RQ5H030TN</a> 3A, <b>67mΩ</b> 2.5V drive Gen.1	<a href="#">RSH070N05</a> 7.0A, <b>25mΩ</b> 4V drive Gen.1	<a href="#">RD3H200SN</a> 20A, <b>28mΩ</b> 4V drive Gen.1
45V	<a href="#">RQ5H025TN</a> 2.5A, <b>130mΩ</b> 2.5V drive Gen.1		
	<a href="#">RQ5H020TN</a> 2A, <b>180mΩ</b> 2.5V drive Gen.1		

$R_{DS(on)}$  max at  $V_{GS}=4.5V$  (2.5V drive)

$R_{DS(on)}$  max at  $V_{GS}=10V$  (4V drive)

Single ( $V_{DS}=60V$ )

The data is sorted in ascending order of  $R_{DS(on)}$ .

Pin	8pin	6pin	3pin	8pin	8pin	9pin	9pin				
(mm)	2.0x2.0	2.0x2.1	2.9x2.8	3.0x2.8	3.3x3.3	3.3x3.3	3.3x3.3				
Package	HUML2020 L8	TUMT6	TSMT3	TSMT8	HSMT8	DFN3333-9L	DFN3333-9L DSC				
$V_{DS}$											
60V	<a href="#">RF4L070BG</a> 7A, <b>27mΩ</b> 4.5V drive Gen.6	<a href="#">RF6L025BG</a> 2.5A, <b>91mΩ</b> 4.5V drive Gen.6	<a href="#">RQ5L045BG</a> 4.5A, <b>32mΩ</b> 4.5V drive Gen.6	<a href="#">RQ7L055BG</a> 5.5A, <b>29mΩ</b> 4.5V drive Gen.6	<a href="#">RH6L040CG</a> 90A*, <b>5.6mΩ</b> 4.5V drive Gen.7	RH8L130CG 130A*, <b>3.8mΩ</b> 4.5V drive Gen.7	RB8L130CG 130A*, <b>3.8mΩ</b> 4.5V drive Gen.7				
			<a href="#">RQ5L030SN</a> 3A, <b>85mΩ</b> 4V drive Gen.1		<a href="#">RH6L040CH</a> 85A*, <b>5.8mΩ</b> 6V drive Gen.7	RH8L130CH 130A*, <b>3.9mΩ</b> 6V drive Gen.7	RB8L130CH 130A*, <b>3.9mΩ</b> 6V drive Gen.7				
			<a href="#">RQ5L020SN</a> 2A, <b>170mΩ</b> 4V drive Gen.1		<a href="#">RH6L040BG</a> 65A*, <b>7.1mΩ</b> 4.5V drive Gen.6						
					<a href="#">RQ3L070BG</a> 20A**, <b>24.7mΩ</b> 4.5V drive Gen.6						
					<a href="#">RQ3L060BG</a> 15.5A**, <b>38mΩ</b> 4.5V drive Gen.6						
60V	8pin	8pin	8pin	8pin	8pin	8pin	3pin	3pin	3pin	3pin	
	5.0x6.0	5.0x6.0	5.0x6.0	5.2x6.15	5.2x6.15	8.0x8.0	6.6x10.0	10.16x15.1	10x29	10.16x29.07	
	SOP8	HSOP8	DFN5060-8L	HSOP8	HSOP8-DC	DFN8080-8L	TO-252	TO-263AB	TO-220FP	TO-220AB	
											
	<a href="#">RSH065N06</a> 6.5A, <b>37mΩ</b> 4V drive Gen.1	RS6L120CG 195A*, <b>2.1mΩ</b> 4.5V drive Gen.7	<a href="#">RS7L200CG</a> 275A*, <b>1.39mΩ</b> 4.5V drive Gen.7	RG5L245CH 245A*, <b>1.76mΩ</b> 6V drive Gen.7	RG6L245CH 245A*, <b>1.76mΩ</b> 6V drive Gen.7	RY7L250CG 535A*, <b>0.59mΩ</b> 4.5V drive Gen.7	<a href="#">RD3L07BBG</a> 115A*, <b>3.9mΩ</b> 4.5V drive Gen.6	<a href="#">RJ1L10BBG</a> 240A*, <b>1.85mΩ</b> 4.5V drive Gen.6	<a href="#">RX2L10BBG</a> 180A*, <b>1.84mΩ</b> 4.5V drive Gen.6	<a href="#">RX3L18BBG</a> 240A*, <b>1.84mΩ</b> 4.5V drive Gen.6	
		RS6L120CH 190A*, <b>2.2mΩ</b> 6V drive Gen.7	<a href="#">RS7L200CH</a> 270A*, <b>1.44mΩ</b> 6V drive Gen.7			RY7L250CH 520A*, <b>0.62mΩ</b> 6V drive Gen.7	<a href="#">RD3L03BBG</a> 50A*, <b>11.3mΩ</b> 4.5V drive Gen.6	<a href="#">RJ1L04BBG</a> 100A*, <b>4.6mΩ</b> 4.5V drive Gen.6	<a href="#">RX2L07BBG</a> 80A*, <b>4.6mΩ</b> 4.5V drive Gen.6	<a href="#">RX3L07BBG</a> 105A*, <b>4.6mΩ</b> 4.5V drive Gen.6	
		<a href="#">RS6L120BG</a> 150A*, <b>2.7mΩ</b> 4.5V drive Gen.6					<a href="#">RD3L220SN</a> 22A, <b>26mΩ</b> 4V drive Gen.1				
		<a href="#">RS6L120BH</a> 150A*, <b>2.7mΩ</b> 6V drive Gen.6					<a href="#">RD3L150SN</a> 15A, <b>40mΩ</b> 4V drive Gen.1				
		RS6L122CG 140A*, <b>2.9mΩ</b> 4.5V drive Gen.7					<a href="#">RD3L080SN</a> 8A, <b>80mΩ</b> 4V drive Gen.1				
		RS6L122CH 140A*, <b>3.0mΩ</b> 6V drive Gen.7					<a href="#">RD3L050SN</a> 5A, <b>109mΩ</b> 4V drive Gen.1				
		<a href="#">RS6L090BG</a> 90A**, <b>4.7mΩ</b> 4.5V drive Gen.6									
		<a href="#">RS6L090BH</a> 90A**, <b>5.0mΩ</b> 6V drive Gen.6									




$R_{DS(on)}$  max at  $V_{GS}=4.5V$  (2.5V drive)

$R_{DS(on)}$  max at  $V_{GS}=10V$  (4V, 4.5V, 6V drive)

Note) \*IDSL(A)\_Silicon limit, \*\*Tc=25°C

Part No.: Under development (No link. Specifications subject to change.)

Single ( $V_{DSS}=80V$ )The data is sorted in ascending order of  $R_{DS(on)}$ .

Pin	8pin	9pin	9pin	8pin	8pin	8pin
(mm)	3.3x3.3x0.75	3.3x3.3x1.0	3.3x3.3x0.65	5.0x6.0x1.0	5.0x6.0x1.0	5.2x6.15x0.75
Package	HSMT8	DFN3333-9L	DFN3333-9L DSC	HSOP8	DFN5060-8L	HSOP8-DC
$V_{DSS}$						
80V	RH6N085CH 85A*, <b>6.1mΩ</b> 8V drive Gen.7	RH8N105BG 105A**, <b>5.0mΩ</b> 4.5V drive Gen.6	RB8N105BG 105A**, <b>5.0mΩ</b> 4.5V drive Gen.6	RS6N185CH 185A**, <b>2.3mΩ</b> 8V drive Gen.7	<a href="#">RS7N200CH</a> 295A*, <b>1.43mΩ</b> 8V drive Gen.7	RG6N240CH 240A*, <b>1.83mΩ</b> 8V drive Gen.7
	RH6N040BG 65A*, <b>7.8mΩ</b> 4.5V drive Gen.6	RH8N105BH 105A**, <b>5.5mΩ</b> 6V drive Gen.6	RB8N105BH 105A**, <b>5.5mΩ</b> 6V drive Gen.6	<a href="#">RS6N120BH</a> 135A*, <b>3.3mΩ</b> 6V drive Gen.6	<a href="#">RS7N200BH</a> 230A*, <b>2.0mΩ</b> 6V drive Gen.6	RG6N210BH 210A*, <b>2.4mΩ</b> 6V drive Gen.6
	<a href="#">RH6N040BH</a> 65A*, <b>8.3mΩ</b> 6V drive Gen.6				<a href="#">RS7N160BH</a> 160A**, <b>2.6mΩ</b> 6V drive Gen.6	
80V	3pin	9pin	3pin	3pin		
	6.6x10.0x2.3	9.9x11.68x2.3	10.16x15.1x4.57	10.16x29.07x4.44		
	TO-252	TOLL	TO-263AB	TO-220AB		
						
	<a href="#">RD3N07BBH</a> 105A*, <b>4.4mΩ</b> 6V drive Gen.6	RJ2N17BCH 450A*, <b>0.9mΩ</b> 8V drive Gen.7	<a href="#">RJ1N10BBH</a> 235A*, <b>2.0mΩ</b> 6V drive Gen.6	<a href="#">RX3N10BBH</a> 225A*, <b>2.2mΩ</b> 6V drive Gen.6		
	RJ2N17BBH 400A*, <b>1.16mΩ</b> 6V drive Gen.6	<a href="#">RJ1N04BBH</a> 100A*, <b>5.3mΩ</b> 6V drive Gen.6	<a href="#">RX3N07BBH</a> 100A*, <b>5.1mΩ</b> 6V drive Gen.6			

 $R_{DS(on)}$  max at  $V_{GS}=10V$ 










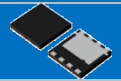

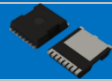



Note) \*IDSL(A)\_Silicon limit, \*\*Tc=25°C

Part No.: Under development (No link. Specifications subject to change.)



Single ( $V_{DS}=100V$ )

The data is sorted in ascending order of  $R_{DS(on)}$ .












Pin	8pin	3pin	8pin	9pin	9pin	8pin	8pin	8pin	8pin
(mm)	2.0x2.0	2.9x2.8	3.3x3.3	3.3x3.3	3.3x3.3	5.0x6.0	5.0x6.0	5.2x6.15	5.2x6.15
Package	HUML2020L8	TSMT3	HSMT8	DFN3333-9L	DFN3333-9L DSC	HSOP8	DFN5060-8L	HSOP8	HSOP8-DC
$V_{DSS}$									
100V	<a href="#">RF4P060BG</a> 6A, <b>53mΩ</b> 4.5V drive Gen.6	<a href="#">RQ5P035BG</a> 3.5A, <b>60mΩ</b> 4.5V drive Gen.6	RH6P040CH 65A*, <b>10.7mΩ</b> 8V drive Gen.7	RH8P085CH 85A*, <b>7.3mΩ</b> 8V drive Gen.7	RB8P085CH 85A*, <b>7.3mΩ</b> 8V drive Gen.7	RS6P120CH 140A**, <b>4.0mΩ</b> 6V drive Gen.7	RS7P200CH 205A*, <b>2.5mΩ</b> 8V drive Gen.7	RG5P180CH 180A**, <b>3.2mΩ</b> 8V drive Gen.7	RG6P180CH 180A**, <b>3.2mΩ</b> 8V drive Gen.7
		<a href="#">RQ5P010SN</a> 1A, <b>520mΩ</b> 4V drive Gen.1	<a href="#">RQ3P300BH</a> 39A**, <b>15.5mΩ</b> 6V drive Gen.6			RS6P122CH 105A**, <b>5.6mΩ</b> 8V drive Gen.7	<a href="#">RS7P150BH</a> 150A**, <b>3.8mΩ</b> 6V drive Gen.6		
			<a href="#">RH6P040BH</a> 40A**, <b>15.6mΩ</b> 6V drive Gen.6			<a href="#">RS6P100BG</a> 100A**, <b>5.9mΩ</b> 4.5V drive Gen.6	<a href="#">RS7P200BM</a> 200A**, <b>4.0mΩ</b> 10V drive Gen.6 <b>WideSOA</b>		
						<a href="#">RS6P100BH</a> 100A**, <b>5.9mΩ</b> 6V drive Gen.6			
						<a href="#">RS1P600BH</a> 60A**, <b>8.8mΩ</b> 6V drive Gen.6			
						<a href="#">RS6P060BH</a> 60A**, <b>10.6mΩ</b> 6V drive Gen.6			
100V	8pin	3pin	9pin	3pin	3pin	3pin			
	8.0x8.0	6.6x10.0	9.9x11.68	10.16x15.1	10x29	10.16x29.07			
	DFN8080-8L	TO-252	TOLL	TO-263AB	TO-220FP	TO-220AB			
									
	RY7P250CH 390A*, <b>1.11mΩ</b> 6V drive Gen.7	<a href="#">RD3P07BBH</a> 80A*, <b>7.7mΩ</b> 6V drive Gen.6	RJ2P17BCH 360A**, <b>1.41mΩ</b> 8V drive Gen.7	<a href="#">RJ1P10BBH</a> 170A*, <b>3.0mΩ</b> 6V drive Gen.6	<a href="#">RX2P07CBH</a> 85A*, <b>5.2mΩ</b> 6V drive Gen.6	<a href="#">RX3P10BBH</a> 170A*, <b>3.3mΩ</b> 6V drive Gen.6			
	<a href="#">RY7P250BM</a> 300A*, <b>1.86mΩ</b> 10V drive Gen.6 <b>WideSOA</b>	<a href="#">RD3P03BBH</a> 35A**, <b>23mΩ</b> 6V drive Gen.6	<a href="#">RJ2P17BBH</a> 295A*, <b>2.0mΩ</b> 6V drive Gen.6	<a href="#">RJ1P07CBH</a> 120A*, <b>5.1mΩ</b> 6V drive Gen.6	<a href="#">RX2P06BBH</a> 65A**, <b>8.4mΩ</b> 6V drive Gen.6	<a href="#">RX3P07CBH</a> 120A*, <b>5.2mΩ</b> 6V drive Gen.6			
		<a href="#">RD3P200SN</a> 20A, <b>46mΩ</b> 4V drive Gen.1	RJ2P17BBM 290A*, <b>2.2mΩ</b> 10V drive Gen.6 <b>WideSOA</b>	<a href="#">RJ1P04BBH</a> 80A*, <b>8.8mΩ</b> 6V drive Gen.6		<a href="#">RX3P07BBH</a> 80A*, <b>8.4mΩ</b> 6V drive Gen.6			
		<a href="#">RD3P175SN</a> 17.5A, <b>105mΩ</b> 4V drive Gen.1	<a href="#">RJ2P14BBH</a> 225A*, <b>2.8mΩ</b> 6V drive Gen.6						
	<a href="#">RD3P100SN</a> 10A, <b>133mΩ</b> 4V drive Gen.1								
	<a href="#">RD3P050SN</a> 5.0A, <b>190mΩ</b> 4V drive Gen.1								

$R_{DS(on)}$  max at  $V_{GS}=10V$

Note) \*IDSL(A)\_Silicon limit, \*\*Tc=25°C

Part No.: Under development (No link. Specifications subject to change.)

Single ( $V_{DSS}=150V$ )The data is sorted in ascending order of  $R_{DS(on)}$ .

Pin	8pin	9pin	9pin	8pin	8pin	8pin
(mm)	3.3x3.3x0.75	3.3x3.3x1.0	3.3x3.3x0.65	5.0x6.0x1.0	5.0x6.0x1.0	8.0x8.0x1.0
Package	HSMT8	DFN3333-9L	DFN3333-9L DSC	HSOP8	DFN5060-8L	DFN8080-8L
$V_{DSS}$						
150V	<a href="#">RH6R040CH</a> 40A**, 38mΩ 8V drive Gen.7	RH8R045CH 45A*, 26mΩ 8V drive Gen.7	RB8R045CH 45A*, 26mΩ 8V drive Gen.7	<a href="#">RS6R085CH</a> 85A**, 13.9mΩ 8V drive Gen.7	<a href="#">RS7R125CH</a> 125A**, 8.3mΩ 8V drive Gen.7	RY7R250CH 250A**, 4mΩ 8V drive Gen.7
	<a href="#">RH6R025BH</a> 25A**, 60mΩ 6V drive Gen.6			<a href="#">RS6R060BH</a> 60A**, 21.8mΩ 6V drive Gen.6		
				<a href="#">RS6R035BH</a> 35A**, 41mΩ 6V drive Gen.6		
150V	3pin	9pin	3pin	3pin	3pin	
	6.6x10.0x2.3	9.9x11.68x2.3	10.16x15.1x4.57	10.0x29.0x4.7	10.16x29.07x4.44	
	TO-252	TOLL	TO-263AB	TO-220FP	TO-220AB	
						
	<a href="#">RD3R05BBH</a> 50A**, 29mΩ 6V drive Gen.6	RJ2R17BCH 205A**, 4.3mΩ 8V drive Gen.7	<a href="#">RJ1R10BBH</a> 105A**, 8.2mΩ 6V drive Gen.6	<a href="#">RX2R03BBH</a> 35A**, 29mΩ 6V drive Gen.6	<a href="#">RX3R10BBH</a> 105A**, 8.8mΩ 6V drive Gen.6	
<a href="#">RD3R02BBH</a> 20A**, 81mΩ 6V drive Gen.6		<a href="#">RJ1R04BBH</a> 40A**, 27mΩ 6V drive Gen.6		<a href="#">RX3R05BBH</a> 50A**, 29mΩ 6V drive Gen.6		









 $R_{DS(on)}$  max at  $V_{GS}=10V$ 

Note) \*IDSL(A)\_Silicon limit, \*\*Tc=25°C

Part No.: Under development (No link. Specifications subject to change.)

## 6. Dual type products






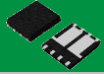
Dual ( $V_{DS}=30V, 40V, 45V$ )The data is sorted in ascending order of  $R_{DS(on)}$ .

Pin	8pin	8pin	10pin	8pin	8pin	8pin	9pin	9pin
(mm)	2.0x2.0x0.6	3.0x2.8x0.8	3.0x3.0x0.6	3.3x3.3x0.75	5.0x6.0x1.75	5.0x6.0x1.0	5.0x6.0x1.0	5.0x6.0x1.0
Package	HUML2020L8	TSMT8	HSML3030L10	HSMT8	SOP8	HSOP8	HSOP8	HSOP8
$V_{DS}$								
2.5V drive	30V	<a href="#">UT6K3</a> 5.5A, <b>42mΩ</b> 2.5V drive Gen.5	<a href="#">QH8KA4</a> 9A, <b>17mΩ</b> 2.5V drive Gen.5	<a href="#">HS8K1</a> 10/11A, <b>14.6/11.8mΩ</b> 4.5V drive Gen.4	<a href="#">HT8KA6</a> 15A**, <b>10.9mΩ</b> 4.5V drive Gen.4	<a href="#">SH8KA7</a> 15A, <b>9.3mΩ</b> 4.5V drive Gen.4	<a href="#">HP8KA1</a> 14A, <b>5mΩ</b> 4.5V drive Gen.4	<a href="#">HP8K24</a> 27/80A**, <b>8.8/3.0mΩ</b> 4.5V drive Gen.4
		<a href="#">QH8KA3</a> 9A, <b>16mΩ</b> 4.5V drive Gen.4	<a href="#">HS8K11</a> 7/11A, <b>17.9/13.3mΩ</b> 4.5V drive Gen.4/5	<a href="#">HT8KA5</a> 12A**, <b>16.4mΩ</b> 4.5V drive Gen.4	<a href="#">SH8KA4</a> 9A, <b>21.4mΩ</b> 4.5V drive Gen.4	<a href="#">HP8K22</a> 27/57A**, <b>8.8/4.6mΩ</b> 4.5V drive Gen.4		
		<a href="#">QH8K13</a> 6A, <b>28mΩ</b> 4V drive Gen.3			<a href="#">SH8KA2</a> 8A, <b>28.0mΩ</b> 4.5V drive Gen.4			
		<a href="#">QH8KA2</a> 4.5A, <b>35mΩ</b> 4.5V drive Gen.4			<a href="#">SH8K12</a> 5A, <b>42mΩ</b> 4V drive Gen.3			
		<a href="#">QH8K11</a> 3.5A, <b>50mΩ</b> 4V drive Gen.3			<a href="#">SH8KA1</a> 4.5A, <b>80mΩ</b> 4.5V drive Gen.4			
		<a href="#">QH8KA1</a> 4.5A, <b>73mΩ</b> 4.5V drive Gen.4			<a href="#">SH8K11</a> 3.5A, <b>98mΩ</b> 4V drive Gen.3			
	40V	<a href="#">UT6KB5</a> 5A, <b>48mΩ</b> 4.5V drive Gen.6	<a href="#">QH8KB6</a> 8A, <b>17.7mΩ</b> 4.5V drive Gen.6	<a href="#">HT8KB6</a> 15A**, <b>17.2mΩ</b> 4.5V drive Gen.6	<a href="#">SH8KB7</a> 13.5A, <b>8.4mΩ</b> 4.5V drive Gen.6	<a href="#">HP8KB7</a> 24A**, <b>8mΩ</b> 4.5V drive Gen.6		
			<a href="#">QH8KB5</a> 7.5A, <b>44mΩ</b> 4.5V drive Gen.6	<a href="#">HT8KB5</a> 12A**, <b>47mΩ</b> 4.5V drive Gen.6	<a href="#">SH8KB6</a> 8.5A, <b>19.4mΩ</b> 4.5V drive Gen.6	<a href="#">HP8KB6</a> 24A**, <b>15.7mΩ</b> 4.5V drive Gen.6		
					<a href="#">SH8KB5</a> 4.5A, <b>55mΩ</b> 4.5V drive Gen.6	<a href="#">HP8KB5</a> 16.5A**, <b>46mΩ</b> 4.5V drive Gen.6		
	45V		<a href="#">QH8K21</a> 4A, <b>53mΩ</b> 4V drive Gen.1					

 $R_{DS(on)}$  max at  $V_{GS}=4.5V$  (2.5V drive) $R_{DS(on)}$  max at  $V_{GS}=10V$  (4V, 4.5V drive)

Note) \*\*Tc=25°C, Part No.: Under development (No link. Specifications subject to change.)

Dual ( $V_{DS}=60V, 80V, 100V, 150V$ )The data is sorted in ascending order of  $R_{DS(on)}$ .

Pin	8pin	8pin	10pin	8pin	8pin	8pin
(mm)	2.0x2.0x0.6	3.0x2.8x0.8	3.0x3.0x0.6	3.3x3.3x0.75	5.0x6.0x1.75	5.0x6.0x1.0
Package	HUML2020L8	TSMT8	HSML3030L10	HSMT8	SOP8	HSOP8
$V_{DS}$						
60V	<a href="#">UT6KC5</a> 3.5A, <b>95mΩ</b> 4.5V drive Gen.6	<a href="#">QH8KC6</a> 5.5A, <b>30mΩ</b> 4.5V drive Gen.6		<a href="#">HT8KC6</a> 15A**, <b>29mΩ</b> 4.5V drive Gen.6	<a href="#">SH8KC7</a> 10.5A, <b>12.4mΩ</b> 4.5V drive Gen.6	<a href="#">HP8KC7</a> 24A**, <b>11.5mΩ</b> 4.5V drive Gen.6
		<a href="#">QH8KC5</a> 3A, <b>90mΩ</b> 4.5V drive Gen.6		<a href="#">HT8KC5</a> 10A**, <b>90mΩ</b> 4.5V drive Gen.6	<a href="#">SH8KC6</a> 6.5A, <b>32mΩ</b> 4.5V drive Gen.6	<a href="#">HP8KC6</a> 23A**, <b>27mΩ</b> 4.5V drive Gen.6
					<a href="#">SH8KC5</a> 3.5A, <b>95mΩ</b> 4.5V drive Gen.6	HP8KC5D 12A**, <b>90mΩ</b> 4.5V drive Gen.6 <b>High-ESD</b>
						<a href="#">HP8KC5</a> 12A**, <b>90mΩ</b> 4.5V drive Gen.6
80V				<a href="#">HT8KD6H</a> 15A**, <b>33mΩ</b> 6V drive Gen.6		<a href="#">HP8KD6H</a> 18A**, <b>32mΩ</b> 6V drive Gen.6
100V	<a href="#">UT6KE5</a> 2A, <b>207mΩ</b> 4.5V drive Gen.6	<a href="#">QH8KE6</a> 4A, <b>56mΩ</b> 4.5V drive Gen.6	<a href="#">HS8KE6H</a> 6.5A, <b>43mΩ</b> 8V drive Gen.7	<a href="#">HT8KE6</a> 13A**, <b>57mΩ</b> 4.5V drive Gen.6	<a href="#">SH8KE7</a> 8A, <b>20.9mΩ</b> 4.5V drive Gen.6	<a href="#">HP8KE7</a> 24A**, <b>19.6mΩ</b> 4.5V drive Gen.6
		<a href="#">QH8KE5</a> 2A, <b>202mΩ</b> 4.5V drive Gen.6	<a href="#">HS8KE5</a> 4.5A, <b>59mΩ</b> 4.5V drive Gen.6	<a href="#">HT8KE6D</a> 12.5A**, <b>60mΩ</b> 6V drive Gen.6 <b>High-ESD</b>	<a href="#">SH8KE6</a> 4.5A, <b>58mΩ</b> 4.5V drive Gen.6	<a href="#">HP8KE6</a> 17A**, <b>54mΩ</b> 4.5V drive Gen.6
		<a href="#">QH8K51</a> 2A, <b>325mΩ</b> 4V drive Gen.1		<a href="#">HT8KE6H</a> 12.5A**, <b>60mΩ</b> 6V drive Gen.6	<a href="#">SH8KE5</a> 2.5A, <b>200mΩ</b> 4.5V drive Gen.6	<a href="#">HP8KE5</a> 8.5A**, <b>193mΩ</b> 4.5V drive Gen.6
				<a href="#">HT8KE5</a> 7A**, <b>193mΩ</b> 4.5V drive Gen.6		
				<a href="#">HT8KE5H</a> 6.5A**, <b>210mΩ</b> 6V drive Gen.6		
150V				<a href="#">HT8KF6H</a> 7A**, <b>214mΩ</b> 6V drive Gen.6		<a href="#">HP8KF7H</a> 18.5A**, <b>62mΩ</b> 6V drive Gen.6

 $R_{DS(on)}$  max at  $V_{GS}=10V$ 

Note) \*\*Tc=25°C, Part No.: Under development (No link. Specifications subject to change.)

7. Nomenclature of the Part Number (New Products)

Single MOSFETs



## Dual MOSFETs

<b>H</b>	<b>T</b>	<b>8</b>	<b>K</b>	<b>E</b>	<b>6</b>	<b>(H)</b>
Package	Pin quantity	Polarity	$V_{DSS}$	Serial No.	Specification	
HP8 = HSOP8		J = P-ch, dual	A = 30V		D = ESD protection	
HS8 = HSML3030L10		K = N-ch, dual	B = 40V		H = High drive /	
HS8 = DFN3333-9DC (HSML3333L9)		M = N-ch + P-ch	C = 60V		6V Drive	
HT8 = HSMT8			D = 80V			
QH8 = TSMT8			E = 100V			
SH8 = SOP8			F = 150V			
UT6 = DFN2020-8D (HUML2020L8)						

Part Number Information Link:

[https://fscdn.rohm.com/en/products/databook/explanation/discrete/transistor/common/transistor\\_part\\_number\\_information\\_an-e.pdf](https://fscdn.rohm.com/en/products/databook/explanation/discrete/transistor/common/transistor_part_number_information_an-e.pdf)

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