



功率元器件

# IGBT

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B

IGBT

已通过ISO 9001/ISO/TS 16949 认证

# Field Stop Trench IGBT

## ●Field Stop Trench IGBT快速参考标准产品

Series	V <sub>CES</sub> (V) (T <sub>C</sub> =25°C)	I <sub>C</sub> (A) (T <sub>C</sub> =100°C)	Package							
			TO-247N				TO-3PFM			
			IGBT Single		Built-in FRD		IGBT Single		Built-in FRD	
RGTH series (High speed switching)	650	20	RGTH40TS65	1	RGTH40TS65D	6	RGTH40TK65	11	RGTH40TK65D	16
		25	RGTH50TS65	2	RGTH50TS65D	7	RGTH50TK65	12	RGTH50TK65D	17
		30	RGTH60TS65	3	RGTH60TS65D	8	RGTH60TK65	13	RGTH60TK65D	18
		40	RGTH80TS65	4	RGTH80TS65D	9	RGTH80TK65	14	RGTH80TK65D	19
		50	RGTH00TS65	5	RGTH00TS65D	10	RGTH00TK65	15	RGTH00TK65D	20
RGCL series (Low V <sub>CE(sat)</sub> )	600	30	RGCL60TS60	21	RGCL60TS60D	23	RGCL60TK60	25	RGCL60TK60D	27
		40	RGCL80TS60	22	RGCL80TS60D	24	RGCL80TK60	26	RGCL80TK60D	28

## 短路耐量保证产品

Series	V <sub>CES</sub> (V) (T <sub>C</sub> =25°C)	I <sub>C</sub> (A) (T <sub>C</sub> =100°C)	Package											
			TO-252	TO-263S(LPDS)/TO-262	TO-263L(LPDL)	TO-220NFM	TO-247N							
			Built-in FRD	Built-in FRD	Built-in FRD	Built-in FRD	IGBT Single	Built-in FRD						
RGT series (tsc 5μs Min.)	650	4	RGT8BM65D	29	RGT8NS65D	31	New RGT8NL65D	36						
		5					New RGT16TM65D	41						
		8	RGT16BM65D	30	RGT16NS65D	32	New RGT16NL65D	37	New RGT30TM65D	42				
		10					New RGT40TM65D	43						
		13					New RGT50TM65D	44						
		15			RGT30NS65D	33	New RGT30NL65D	38						
		20			RGT40NS65D	34	New RGT40NL65D	39				RGT40TS65D	50	
		25			RGT50NS65D	35	New RGT50NL65D	40				RGT50TS65D	51	
		30									New RGTV60TS65	45	New RGTV60TS65D	48
		40											RGT60TS65D	52
		50											RGT80TS65D	53
		80										New RGTV00TS65	46	New RGTV00TS65D
RGS series (tsc 8μs Min.)	650	30										RGS60TS65DHR	55	
		40										RGS80TS65DHR	56	
		50											RGS00TS65DHR	57
													New RGS00TS65EHR	58

注)封装采用JEDEC表示。( )内表示ROHM封装。

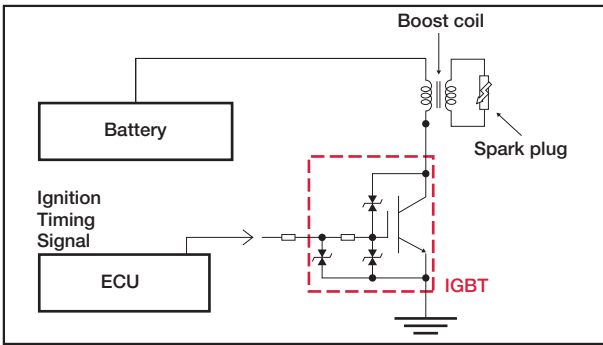
Field Stop Trench IGBT															
No.	Part No.	V <sub>CES</sub> (V)	I <sub>C</sub> (A)		P <sub>0</sub> (W)	V <sub>CE(sat)</sub> Typ.(V)	I <sub>C</sub> (A)	t <sub>sc</sub> Min. (μsec)	I <sub>F(Diode)</sub> (A)		V <sub>F(Diode)</sub> Typ.(V)	I <sub>F</sub> (A)	Package	Equivalent Circuit Diagram	Automotive Grade AEC-Q101
			T <sub>C</sub> =25°C	T <sub>C</sub> =100°C					T <sub>C</sub> =25°C	T <sub>C</sub> =100°C					
1	RGTH40TS65	650	40	20	144	1.6	20	-	-	-	-	TO-247N		-	
2	RGTH50TS65	650	50	25	174	1.6	25	-	-	-	-			-	
3	RGTH60TS65	650	58	30	194	1.6	30	-	-	-	-			-	
4	RGTH80TS65	650	70	40	234	1.6	40	-	-	-	-			-	
5	RGTH00TS65	650	85	50	277	1.6	50	-	-	-	-			-	
6	RGTH40TS65D	650	40	20	144	1.6	20	-	35	20	1.45			20	-
7	RGTH50TS65D	650	50	25	174	1.6	25	-	35	20	1.45			20	-
8	RGTH60TS65D	650	58	30	194	1.6	30	-	40	20	1.35			20	-
9	RGTH80TS65D	650	70	40	234	1.6	40	-	40	20	1.35			20	-
10	RGTH00TS65D	650	85	50	277	1.6	50	-	50	30	1.45			30	-
11	RGTH40TK65	650	23	14	56	1.6	20	-	-	-	-	TO-3PFM		-	
12	RGTH50TK65	650	26	16	59	1.6	25	-	-	-	-			-	
13	RGTH60TK65	650	28	17	61	1.6	30	-	-	-	-			-	
14	RGTH80TK65	650	31	19	66	1.6	40	-	-	-	-			-	
15	RGTH00TK65	650	35	21	72	1.6	50	-	-	-	-			-	
16	RGTH40TK65D	650	23	14	56	1.6	20	-	26	15	1.45			20	-
17	RGTH50TK65D	650	26	16	59	1.6	25	-	26	15	1.45			20	-
18	RGTH60TK65D	650	28	17	61	1.6	30	-	28	16	1.35			20	-
19	RGTH80TK65D	650	31	19	66	1.6	40	-	28	16	1.35			20	-
20	RGTH00TK65D	650	35	21	72	1.6	50	-	34	19	1.45			30	-
21	RGCL60TS60	600	48	30	111	1.4	30	-	-	-	-	TO-247N		-	
22	RGCL80TS60	600	65	40	148	1.4	40	-	-	-	-			-	
23	RGCL60TS60D	600	48	30	111	1.4	30	-	35	20	1.45			20	-
24	RGCL80TS60D	600	65	40	148	1.4	40	-	35	20	1.45			20	-
25	RGCL60TK60	600	30	18	54	1.4	30	-	-	-	-	TO-3PFM		-	
26	RGCL80TK60	600	35	21	57	1.4	40	-	-	-	-			-	
27	RGCL60TK60D	600	30	18	54	1.4	30	-	26	15	1.45			20	-
28	RGCL80TK60D	600	35	21	57	1.4	40	-	26	15	1.45			20	-
29	RGT8BM65D	650	8	4	62	1.65	4	5	7	4	1.45	4	TO-252		-
30	RGT16BM65D	650	16	8	94	1.65	8	5	16	8	1.4	8			-
31	RGT8NS65D	650	8	4	65	1.65	4	5	7	4	1.45	4			-
32	RGT16NS65D	650	16	8	94	1.65	8	5	16	8	1.4	8			-
33	RGT30NS65D	650	30	15	133	1.65	15	5	26	15	1.5	15			-
34	RGT40NS65D	650	40	20	161	1.65	20	5	35	20	1.45	20			-
35	RGT50NS65D	650	48	25	194	1.65	25	5	35	20	1.45	20			-
36	New RGT8NL65D	650	8	4	65	1.65	4	5	7	4	1.45	4			-
37	New RGT16NL65D	650	16	8	94	1.65	8	5	16	8	1.4	8			-
38	New RGT30NL65D	650	30	15	133	1.65	15	5	26	15	1.5	15			-
39	New RGT40NL65D	650	40	20	161	1.65	20	5	35	20	1.45	20	-		
40	New RGT50NL65D	650	48	25	194	1.65	25	5	35	20	1.45	20	-		
41	New RGT16TM65D	650	9	5	22	1.65	8	5	13	7	1.4	8	-		
42	New RGT30TM65D	650	14	8	32	1.65	15	5	17	9	1.5	15	-		
43	New RGT40TM65D	650	17	10	39	1.65	20	5	22	13	1.45	20	-		
44	New RGT50TM65D	650	21	13	47	1.65	25	5	22	13	1.45	20	-		
45	New RGTV60TS65	650	60	30	194	1.5	30	2	-	-	-	TO-247N		-	
46	New RGTV00TS65	650	95	50	276	1.5	50	2	-	-	-			-	
47	New RGTVX6TS65	650	144	80	404	1.5	80	2	-	-	-			-	
48	New RGTV60TS65D	650	60	30	194	1.5	30	2	56	30	1.45			30	-
49	New RGTV00TS65D	650	95	50	276	1.5	50	2	84	50	1.45			50	-
50	RGT40TS65D	650	40	20	144	1.65	20	5	35	20	1.45			20	-
51	RGT50TS65D	650	48	25	174	1.65	25	5	35	20	1.45			20	-
52	RGT60TS65D	650	55	30	194	1.65	30	5	40	20	1.35			20	-
53	RGT80TS65D	650	70	40	234	1.65	40	5	40	20	1.35			20	-
54	RGT00TS65D	650	85	50	277	1.65	50	5	50	30	1.45			30	-
55	RGS60TS65DHR	650	56	30	223	1.65	30	8	56	30	1.45	30	YES		
56	RGS80TS65DHR	650	73	40	272	1.65	40	8	56	30	1.45	30	YES		
57	RGS00TS65DHR	650	88	50	326	1.65	50	8	56	30	1.45	30	YES		
58	New RGS00TS65EHR	650	88	50	326	1.65	50	8	84	50	1.45	50	YES		

注)封装采用JEDEC表示。( )内表示ROHM封装。

\*快速恢复二极管内置

# Ignition IGBT

## ● Ignition IGBT使用例

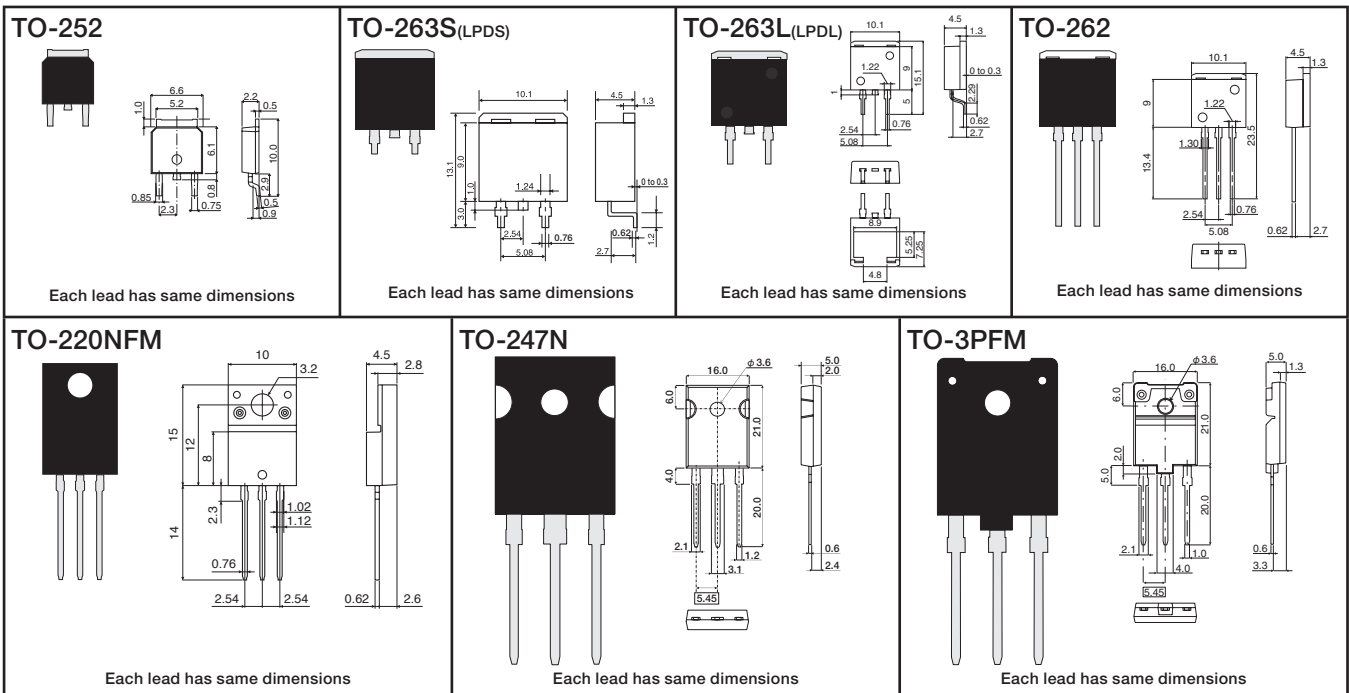


Ignition IGBT									
Part No.	V <sub>CE(S)</sub> (V)	V <sub>GE(S)</sub> (V)	I <sub>c</sub> (A)	P <sub>0</sub> (W)	E <sub>as</sub> (mJ)	V <sub>CE(sat)</sub> Typ. (V)	Package	Equivalent Circuit Diagram	Automotive Grade AEC-Q101
RGPZ10BM40FH	430±30	±10	20	107	250	1.6	TO-252		YES
☆ RGPZ30BM56HR	560±30	±10	30	166	300	1.4	TO-252		YES
RGPR10BM40FH	430±30	±10	20	107	250	1.6	TO-252		YES
☆ RGPR20BM36HR	360±30	±10	20	107	250	1.6	TO-252		YES
RGPR20NS43HR	430±30	±10	20	107	250	1.6	TO-263S(LPDS)		YES
☆ RGPR30BM56HR	560±30	±10	30	166	300	1.4	TO-252		YES
RGPR30BM40HR	400±30	±10	30	125	300	1.6	TO-252		YES
RGPR30NS40HR	400±30	±10	30	125	300	1.6	TO-263S(LPDS)		YES
☆ RGPR50NS45HR	450±30	±10	45	194	500	1.6	TO-263S(LPDS)		YES

注)封装采用JEDEC表示。( )内表示ROHM封装。

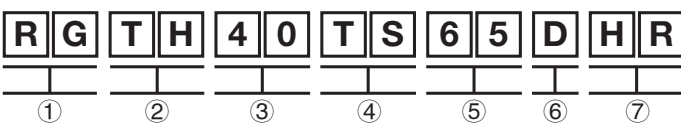
☆ : 开发中

## ● 尺寸 (单位: mm)



注)封装采用JEDEC表示。( )内表示ROHM封装。

## ● 品名构成说明



- |                                             |                     |             |
|---------------------------------------------|---------------------|-------------|
| ① IGBT                                      | ④ 封装                | ⑤ 电压        |
| ② ROHM系列名称                                  | 例 BM → TO-252       | 例 65 → 650V |
| ③ 电流(I <sub>c</sub> )<T <sub>c</sub> =100℃> | NS → TO-263S(LPDS)/ | ⑥ 是否内置FRD   |
| 例 8 → 4A                                    | TO-262              | 例 D → 内置FRD |
| 16 → 8A                                     | NL → TO-263L(LPDL)  | ⑦ 表示支持车载    |
| 30 → 15A                                    | TM → TO-220NFM      |             |
| 40 → 20A                                    | TS → TO-247N        |             |
| 00 → 50A                                    | TK → TO-3PFM        |             |

## ● 封装类型

Package	Code	Packaging Style	Basic Ordering Unit(pcs)
TO-252	TL	Embossed tape	2,500
TO-263S(LPDS)	TL	Embossed tape	1,000
TO-263L(LPDL)	TL	Embossed tape	1,000
TO-262	C9	Tube	50
TO-220NFM	C9	Tube	50
TO-247N	C11	Tube	30
TO-3PFM	C11	Tube	30

注)封装采用JEDEC表示。( )内表示ROHM封装。