



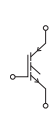
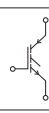
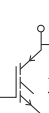
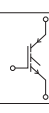

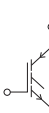
### Field Stop Trench IGBT

No.	Part No.	V <sub>CES</sub> (V)	I <sub>c</sub> (A)		P <sub>D</sub> (W)	V <sub>CE(sat)</sub> Typ (V)	I <sub>c</sub> (A)	t <sub>sc</sub> Min (μsec)	I <sub>F</sub> (Diode) (A)		V <sub>F</sub> (Diode) 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-247GE		—	
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	<b>New</b> RGW40TS65	650	40	20	136	1.5	20	—	—	—	—	TO-247N		—	
22	<b>New</b> RGW50TS65	650	50	25	156	1.5	25	—	—	—	—			—	
23	RGW60TS65	650	60	30	178	1.5	30	—	—	—	—			—	
24	RGW80TS65	650	78	40	214	1.5	40	—	—	—	—			—	
25	RGW00TS65	650	96	50	254	1.5	50	—	—	—	—			—	
26	<b>New</b> RGWX5TS65	650	132	75	348	1.5	75	—	—	—	—			—	
27	<b>New</b> RGW40TS65D	650	40	20	136	1.5	20	—	40	20	1.45		20		—
28	<b>New</b> RGW50TS65D	650	50	25	156	1.5	25	—	40	20	1.45		20		—
29	RGW60TS65D	650	60	30	178	1.5	30	—	40	20	1.45		20		—
30	RGW80TS65D	650	78	40	214	1.5	40	—	40	20	1.45		20		—
31	RGW00TS65D	650	96	50	254	1.5	50	—	56	30	1.45		30		—
32	<b>New</b> RGWX5TS65D	650	132	75	348	1.5	75	—	73	40	1.45		40		—
33	<b>New</b> RGW40TK65	650	27	16	61	1.5	20	—	—	—	—	TO-3PFM		—	
34	<b>New</b> RGW50TK65	650	30	18	67	1.5	25	—	—	—	—			—	
35	RGW60TK65	650	33	20	72	1.5	30	—	—	—	—			—	
36	RGW80TK65	650	39	23	81	1.5	40	—	—	—	—			—	
37	RGW00TK65	650	45	26	89	1.5	50	—	—	—	—			—	
38	<b>New</b> RGW40TK65D	650	27	16	61	1.5	20	—	27	16	1.45		20		—
39	<b>New</b> RGW50TK65D	650	30	18	67	1.5	25	—	27	16	1.45		20		—
40	RGW60TK65D	650	33	20	72	1.5	30	—	27	16	1.45		20		—
41	RGW80TK65D	650	39	23	81	1.5	40	—	27	16	1.45		20		—
42	RGW80TK65E	650	39	23	81	1.5	40	—	46	26	1.45		50		—
43	RGW00TK65D	650	45	26	89	1.5	50	—	34	19	1.45	30	—		
44	RGCL60TS60	600	48	30	111	1.4	30	—	—	—	—	TO-247N		—	
45	RGCL80TS60	600	65	40	148	1.4	40	—	—	—	—			—	
46	RGCL60TS60D	600	48	30	111	1.4	30	—	35	20	1.45		20		—
47	RGCL80TS60D	600	65	40	148	1.4	40	—	35	20	1.45	20	—		
48	RGCL60TK60	600	30	18	54	1.4	30	—	—	—	—	TO-3PFM		—	
49	RGCL80TK60	600	35	21	57	1.4	40	—	—	—	—			—	
50	RGCL60TK60D	600	30	18	54	1.4	30	—	26	15	1.45		20		—
51	RGCL80TK60D	600	35	21	57	1.4	40	—	26	15	1.45		20		—
52	RGCL80TSX8R	1,800	80	40	535	2.2	40	—	80	40	1.8	40	TO-247N		—

Note: Package is JEDEC code.

\*Built-in Fast Recovery Diodes

# Field Stop Trench IGBT

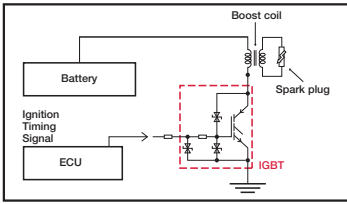
Field Stop Trench IGBT														Package	Equivalent Circuit Diagram	Automotive Grade AEC-Q101
No.	Part No.	V <sub>CES</sub> (V)	I <sub>C</sub> (A)		P <sub>D</sub> (W)	V <sub>CE(sat)</sub> Typ (V)	I <sub>C</sub> (A)	t <sub>sc</sub> Min (μsec)	I <sub>F</sub> (Diode) (A)		V <sub>F(Diode)</sub> Typ (V)	I <sub>F</sub> (A)				
			T <sub>C</sub> =25°C	T <sub>C</sub> =100°C					T <sub>C</sub> =25°C	T <sub>C</sub> =100°C						
53	RGTV60TS65	650	60	30	194	1.5	30	2	—	—	—	—	TO-247N		—	
54	New RGTV80TS65	650	78	40	234	1.5	40	2	—	—	—	—			—	
55	RGTV00TS65	650	95	50	276	1.5	50	2	—	—	—	—			—	
56	New RGTVX2TS65	650	111	60	319	1.5	60	2	—	—	—	—			—	
57	RGTVX6TS65	650	144	80	404	1.5	80	2	—	—	—	—			—	
58	RGTV60TS65D	650	60	30	194	1.5	30	2	56	30	1.45	30			—	
59	New RGTV80TS65D	650	78	40	234	1.5	40	2	73	40	1.45	40			—	
60	RGTV00TS65D	650	95	50	276	1.5	50	2	84	50	1.45	50			—	
61	New RGTVX2TS65D	650	111	60	319	1.5	60	2	98	60	1.45	60			—	
62	New RGTVX6TS65D	650	144	80	404	1.5	80	2	127	80	1.45	80			—	
63	RGTV60TK65	650	33	20	76	1.5	30	2	—	—	—	—	TO-3PFM		—	
64	New RGTV80TK65	650	39	23	85	1.5	40	2	—	—	—	—			—	
65	RGTV00TK65	650	45	26	94	1.5	50	2	—	—	—	—			—	
66	RGTV60TK65D	650	33	20	76	1.5	30	2	34	19	1.45	30			—	
67	New RGTV80TK65D	650	39	23	85	1.5	40	2	40	23	1.45	40			—	
68	RGTV00TK65D	650	45	26	94	1.5	50	2	46	26	1.45	50	—			
69	RGT8BM65D	650	8	4	62	1.65	4	5	7	4	1.45	4	TO-252		—	
70	RGT16BM65D	650	16	8	94	1.65	8	5	16	8	1.4	8			—	
71	RGT8NS65D	650	8	4	65	1.65	4	5	7	4	1.45	4			—	
72	RGT16NS65D	650	16	8	94	1.65	8	5	16	8	1.4	8			—	
73	RGT20NS65D	650	20	10	106	1.65	10	5	16	8	1.4	8			—	
74	RGT30NS65D	650	30	15	133	1.65	15	5	26	15	1.5	15			—	
75	RGT40NS65D	650	40	20	161	1.65	20	5	35	20	1.45	20			—	
76	RGT50NS65D	650	48	25	194	1.65	25	5	35	20	1.45	20			—	
77	New RGT20NL65	650	20	10	106	1.65	10	5	—	—	—	—	TO-263L (LPDL)		—	
78	RGT8NL65D	650	8	4	65	1.65	4	5	7	4	1.45	4			—	
79	RGT16NL65D	650	16	8	94	1.65	8	5	16	8	1.4	8			—	
80	RGT20NL65D	650	20	10	106	1.65	10	5	16	8	1.4	8			—	
81	RGT30NL65D	650	30	15	133	1.65	15	5	26	15	1.5	15			—	
82	RGT40NL65D	650	40	20	161	1.65	20	5	35	20	1.45	20			—	
83	RGT50NL65D	650	48	25	194	1.65	25	5	35	20	1.45	20			—	
84	RGT8TM65D	650	5	3	16	1.65	4	5	5	3	1.45	4	TO-220NFM		—	
85	RGT16TM65D	650	9	5	22	1.65	8	5	13	7	1.4	8			—	
86	New RGT20TM65D	650	10	6	25	1.65	10	5	13	7	1.4	8			—	
87	RGT30TM65D	650	14	8	32	1.65	15	5	17	9	1.5	15			—	
88	RGT40TM65D	650	17	10	39	1.65	20	5	22	13	1.45	20			—	
89	RGT50TM65D	650	21	13	47	1.65	25	5	22	13	1.45	20			—	
90	RGT40TS65D	650	40	20	144	1.65	20	5	35	20	1.45	20			—	
91	RGT50TS65D	650	48	25	174	1.65	25	5	35	20	1.45	20	—			
92	RGT60TS65D	650	55	30	194	1.65	30	5	40	20	1.35	20	—			
93	RGT80TS65D	650	70	40	234	1.65	40	5	40	20	1.35	20	—			
94	RGT00TS65D	650	85	50	277	1.65	50	5	50	30	1.45	30	—			
95	New RGS60TS65HR	650	56	30	223	1.65	30	8	—	—	—	—	TO-247N		YES	
96	New RGS80TS65HR	650	73	40	272	1.65	40	8	—	—	—	—			YES	
97	New RGS00TS65HR	650	88	50	326	1.65	50	8	—	—	—	—			YES	
98	New RGS30TSX2HR	1,200	30	15	267	1.7	15	10	—	—	—	—			YES	
99	New RGS30TSX2	1,200	30	15	267	1.7	15	10	—	—	—	—			—	
100	New RGS50TSX2HR	1,200	50	25	395	1.7	25	10	—	—	—	—			YES	
101	New RGS50TSX2	1,200	50	25	395	1.7	25	10	—	—	—	—			—	
102	New RGS80TSX2HR	1,200	80	40	555	1.7	40	10	—	—	—	—			YES	
103	New RGS80TSX2	1,200	80	40	555	1.7	40	10	—	—	—	—			—	
104	RGS60TS65DHR	650	56	30	223	1.65	30	8	56	30	1.45	30			YES	
105	RGS80TS65DHR	650	73	40	272	1.65	40	8	56	30	1.45	30	YES			
106	RGS00TS65DHR	650	88	50	326	1.65	50	8	56	30	1.45	30	YES			
107	RGS00TS65EHR	650	88	50	326	1.65	50	8	84	50	1.45	50	YES			
108	New RGS30TSX2DHR	1,200	30	15	267	1.7	15	10	30	15	1.65	15	YES			
109	New RGS30TSX2D	1,200	30	15	267	1.7	15	10	30	15	1.65	15	—			
110	New RGS50TSX2DHR	1,200	50	25	395	1.7	25	10	50	25	1.65	25	YES			
111	New RGS50TSX2D	1,200	50	25	395	1.7	25	10	50	25	1.65	25	—			
112	New RGS80TSX2DHR	1,200	80	40	555	1.7	40	10	80	40	1.65	40	YES			
113	New RGS80TSX2D	1,200	80	40	555	1.7	40	10	80	40	1.65	40	—			

Note: Package is JEDEC code. ( ) : ROHM Packages.

\*Built-in Fast Recovery Diodes

# Ignition IGBT

## ●Circuit Example for Ignition IGBT



Ignition IGBT										
Part No.	V <sub>CEs</sub> (V)	V <sub>GES</sub> (V)	I <sub>c</sub> (A)	P <sub>b</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	
RGPR20NL43HR	430±30	±10	20	107	250	1.6	TO-263L (LPDL)		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	
New RGPR50NL45HRB	450±30	±10	45	187	500	1.6	TO-263L (LPDL)	YES		

Note: Package is JEDEC code. ( ) : ROHM Packages.

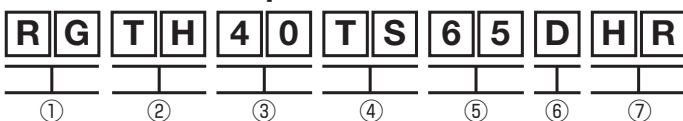
☆: Under Development

## ●Dimensions (Unit: mm)

<b>TO-252</b>  Each lead has same dimensions	<b>TO-263S (LPDS)</b>  Each lead has same dimensions	<b>TO-263L (LPDL)</b>  Each lead has same dimensions	<b>TO-262</b>  Each lead has same dimensions
<b>TO-220NFM</b>  Each lead has same dimensions	<b>TO-247N</b>  Each lead has same dimensions	<b>TO-247GE</b>  Each lead has same dimensions	<b>TO-3PFM</b>  Each lead has same dimensions

Note: Package is JEDEC code. ( ) : ROHM Packages.

## ●Product No. Explanation



- |  |                       |                                       |
|--|-----------------------|---------------------------------------|
| ① IGBT                                   | ④ Package             | ⑤ V <sub>CEs</sub>                    |
| ② Series Name                            | ex. BM → TO-252       | ex. 65 → 650V                         |
| ③ I <sub>c</sub> <T <sub>c</sub> =100°C> | NS → TO-263S (LPDS)/  | ⑥ Fast Recovery Diodes                |
| ex. 8 → 4A                               | TO-262                | ex. D → Built-in Fast Recovery Diodes |
| 16 → 8A                                  | NL → TO263L (LPDL)    | ⑦ Automotive Grade                    |
| 30 → 15A                                 | TM → TO-220NFM        |                                       |
| 00 → 50A                                 | TS → TO-247N/TO-247GE |                                       |
| X6 → 80A                                 | TK → TO-3PFM          |                                       |

## ●Packaging type

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-247GE	C13	Tube	30
TO-3PFM	C11	Tube	30

Note: Package is JEDEC code. ( ) : ROHM Packages