

By Category PDF

Category SiC Schottky Barrier Diodes

Power Devices

# SiC Schottky Barrier Diodes

SiC Schottky Barrier Diodes — 130


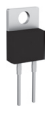
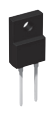
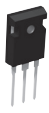

## SiC Schottky Barrier Diodes

SiC Schottky Barrier Diodes

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




## SiC Schottky Barrier Diodes

### ● Quick Reference for SiC Schottky Barrier Diodes

V <sub>RM</sub> (V)	I <sub>F</sub> (A)	Leaded type				Surface Mounted type					
											
		TO-220AC (TO-220ACP)	TO-220ACG	TO-220FM	TO-247 (TO-247N)	TO-263AB (LPTL)					
650	2	SCS302AH	21			SCS302AJ	13				
	4	SCS304AH	22		SCS304AM	29	SCS304AJ	14			
	6	SCS306AH	23	SCS206AG	42	SCS306AM	30	SCS206AJ SCS206AJHR SCS306AJ	1 7 15		
	8	SCS308AH	24	SCS208AG	43	SCS308AM	31	SCS208AJ SCS208AJHR SCS308AJ	2 8 16		
	10	SCS310AH	25	SCS210AG	44	SCS310AM	32	SCS210AJ SCS210AJHR SCS310AJ	3 9 17		
	12	SCS312AH	26	SCS212AG	45	SCS312AM	33	SCS212AJ SCS212AJHR SCS312AJ	4 10 18		
	15	SCS315AH	27	SCS215AG	46	SCS315AM	34	SCS215AJ SCS215AJHR SCS315AJ	5 11 19		
	20	SCS320AH	28	SCS220AG	47	SCS320AM	35	SCS220AE2 SCS220AE2HR	36 39	SCS220AJ SCS220AJHR SCS320AJ	6 12 20
	30						SCS230AE2 SCS230AE2HR	37 40			
	40						SCS240AE2 SCS240AE2HR	38 41			
1,200	5		SCS205KG	56							
	10		SCS210KG	57		SCS210KE2 SCS210KE2HR	48 52				
	15		SCS215KG	58							
	20		SCS220KG	59		SCS220KE2 SCS220KE2HR	49 53				
	30					SCS230KE2 SCS230KE2HR	50 54				
	40					SCS240KE2 SCS240KE2HR	51 55				

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

## SiC Schottky Barrier Diodes

SiC Schottky Barrier Diodes												
No.	Part No.	Absolute Maximum Ratings (T <sub>J</sub> =25°C)				Electrical Characteristics (T <sub>J</sub> =25°C)				Package	Equivalent Circuit Diagram	Automotive Grade AEC-Q101
		V <sub>RRM</sub> (V)	V <sub>R</sub> (V)	I <sub>F</sub> (A)	I <sub>FSM</sub> (A) 10ms	V <sub>F</sub> (V) Typ	I <sub>F</sub> (A)	I <sub>R</sub> (μA) Max	V <sub>R</sub> (V)			
1	SCS206AJ	650	650	6	23	1.35	6	120	600	TO-263AB (LPTL)		—
2	SCS208AJ	650	650	8	30	1.35	8	160	600			—
3	SCS210AJ	650	650	10	38	1.35	10	200	600			—
4	SCS212AJ	650	650	12	43	1.35	12	240	600			—
5	SCS215AJ	650	650	15	52	1.35	15	300	600			—
6	SCS220AJ	650	650	20	68	1.35	20	400	600			—
7	SCS206AJHR	650	650	6	23	1.35	6	120	600			YES
8	SCS208AJHR	650	650	8	30	1.35	8	160	600			YES
9	SCS210AJHR	650	650	10	38	1.35	10	200	600			YES
10	SCS212AJHR	650	650	12	43	1.35	12	240	600			YES
11	SCS215AJHR	650	650	15	52	1.35	15	300	600			YES
12	SCS220AJHR	650	650	20	68	1.35	20	400	600			YES
13	SCS302AJ	650	650	2.15	19	1.35	2.15	10.8	650			—
14	SCS304AJ	650	650	4	27	1.35	4	20	650			—
15	SCS306AJ	650	650	6	47	1.35	6	30	650			—
16	SCS308AJ	650	650	8	67	1.35	8	40	650			—
17	SCS310AJ	650	650	10	82	1.35	10	50	650			—
18	SCS312AJ	650	650	12	96	1.35	12	60	650			—
19	SCS315AJ	650	650	15	112	1.35	15	75	650			—
20	SCS320AJ	650	650	20	123	1.35	20	100	650			—
21	SCS302AH	650	650	2.15	19	1.35	2	10.8	650			—
22	SCS304AH	650	650	4	27	1.35	4	20	650	—		
23	SCS306AH	650	650	6	47	1.35	6	30	650	—		
24	SCS308AH	650	650	8	67	1.35	8	40	650	—		
25	SCS310AH	650	650	10	82	1.35	10	50	650	—		
26	SCS312AH	650	650	12	96	1.35	12	60	650	—		
27	SCS315AH	650	650	15	112	1.35	15	75	650	—		
28	SCS320AH	650	650	20	123	1.35	20	100	650	—		
29	SCS304AM	650	650	4	27	1.35	4	20	650	—		
30	SCS306AM	650	650	6	47	1.35	6	30	650	—		
31	SCS308AM	650	650	8	67	1.35	8	40	650	—		
32	SCS310AM	650	650	10	82	1.35	10	50	650	—		
33	SCS312AM	650	650	12	96	1.35	12	60	650	—		
34	SCS315AM	650	650	15	112	1.35	15	75	650	—		
35	SCS320AM	650	650	20	123	1.35	20	100	650	—		
36	SCS220AE2	650	650	10/20*1	38/76*1	1.35	10	200	600	TO-247 (TO-247N)		—
37	SCS230AE2	650	650	15/30*1	52/104*1	1.35	15	300	600			—
38	SCS240AE2	650	650	20/40*1	67/130*1	1.35	20	400	600			—
39	SCS220AE2HR	650	650	10/20*1	38/76*1	1.35	10	200	600			YES
40	SCS230AE2HR	650	650	15/30*1	52/100*1	1.35	15	300	600			YES
41	SCS240AE2HR	650	650	20/40*1	67/130*1	1.35	20	400	600	YES		
42	SCS206AG	650	650	6	23	1.35	6	120	600	TO-220ACG		—
43	SCS208AG	650	650	8	30	1.35	8	160	600			—
44	SCS210AG	650	650	10	38	1.35	10	200	600			—
45	SCS212AG	650	650	12	43	1.35	12	240	600			—
46	SCS215AG	650	650	15	52	1.35	15	300	600			—
47	SCS220AG	650	650	20	68	1.35	20	400	600	—		
48	SCS210KE2	1,200	1,200	5/10*1	22/45*1	1.4	5	100	1,200	TO-247 (TO-247N)		—
49	SCS220KE2	1,200	1,200	10/20*1	42/84*1	1.4	10	200	1,200			—
50	SCS230KE2	1,200	1,200	15/30*1	62/120*1	1.4	15	300	1,200			—
51	SCS240KE2	1,200	1,200	20/40*1	78/150*1	1.4	20	400	1,200			—
52	SCS210KE2HR	1,200	1,200	5/10*1	22/45*1	1.4	5	100	1,200			YES
53	SCS220KE2HR	1,200	1,200	10/20*1	42/84*1	1.4	10	200	1,200			YES
54	SCS230KE2HR	1,200	1,200	15/30*1	62/120*1	1.4	15	300	1,200			YES
55	SCS240KE2HR	1,200	1,200	20/40*1	78/150*1	1.4	20	400	1,200			YES
56	SCS205KG	1,200	1,200	5	23	1.4	5	100	1,200	TO-220ACG		—
57	SCS210KG	1,200	1,200	10	42	1.4	10	200	1,200			—
58	SCS215KG	1,200	1,200	15	62	1.4	15	300	1,200			—
59	SCS220KG	1,200	1,200	20	79	1.4	20	400	1,200			—

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

\*1 (Per Leg/Device)

## SiC Schottky Barrier Diodes

### ●Dimensions (Unit: mm)

**Surface Mounted type**

**TO-263AB (LPTL)**

Each lead has same dimensions

**Leaded type**

**TO-220AC (TO-220ACP)**

Each lead has same dimensions

**TO-220ACG**

Each lead has same dimensions

**TO-220FM**

Each lead has same dimensions

**TO-247 (TO-247N)**

Each lead has same dimensions

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

### ●Part No. Explanation

#### ●SiC Schottky Barrier Diode Part No. Explanation

**S C S 2 1 0 A J H R**

①      ②      ③      ④      ⑤      ⑥      ⑦

- ① SiC Discrete Device
- ② S → Schottky Barrier Diode
- ③ Generation
- ④ Rated Current[A]  
Example 05 → 5A  
10 → 10A

- ⑤ Rated Voltage  
Example A → 650V  
K → 1,200V
- ⑥ Package  
Example J → TO-263AB (LPTL)  
H → TO-220AC (TO-220ACP)  
E → TO-247 (TO-247N)  
E2 → TO-247 (Dual Chip)  
G → TO-220ACG
- ⑦ Automotive Grade

### ●Packaging type

Package	Code	Packaging Style	Basic Ordering Unit (pcs)
TO-263AB (LPTL)	TLL	Embossed Tape	1,000
TO-220AC (TO-220ACP)	C9	Tube	50
TO-220ACG	C17	Tube	50
TO-220FM	C	Tube	50
TO-247 (TO-247N)	C11	Tube	30

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