

DO-214AA (SMB)

Dimensions in inches and (millimeters)

### FEATURES

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

### TYPICAL APPLICATIONS

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.

### MECHANICAL DATA

- **Package:** DO-214AA (SMB)  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

### MAXIMUM RATINGS (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS32B	SS33B	SS34B	SS35B	SS36B	SS38B	SS310B	SS315B	SS320B
Device marking code			SS32B	SS33B	SS34B	SS35B	SS36B	SS38B	SS310B	SS315B	SS320B
Repetitive peak reverse voltage	V <sub>RRM</sub>	V	20	30	40	50	60	80	100	150	200
Average rectified output current @60Hz sine wave, resistance load, Tc (FIG.1)	I <sub>o</sub>	A	3.0								
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, Ta=25°C	I <sub>FSM</sub>	A	70								
Storage temperature	T <sub>stg</sub>	°C	-55 ~+150								
Junction temperature	T <sub>j</sub>	°C	-55~+125				-55 ~+150				

### ELECTRICAL CHARACTERISTICS (Ta=25°C Unless otherwise specified)

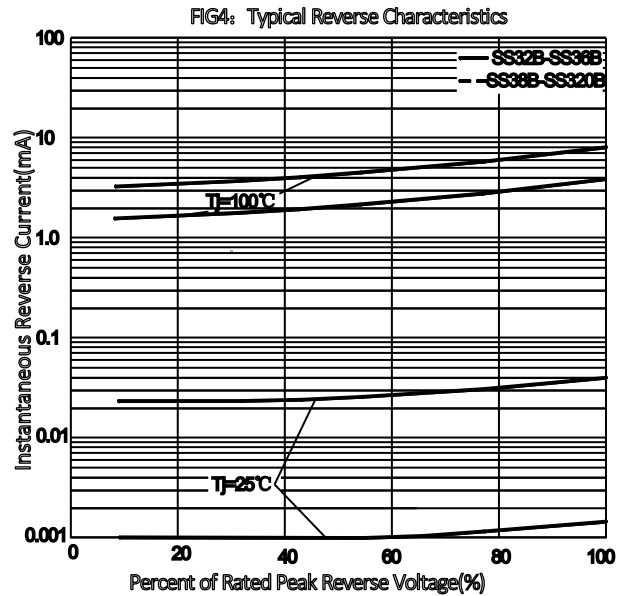
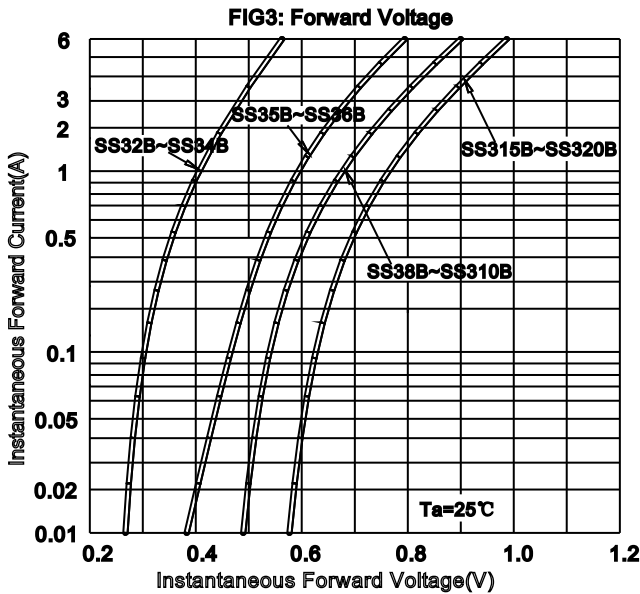
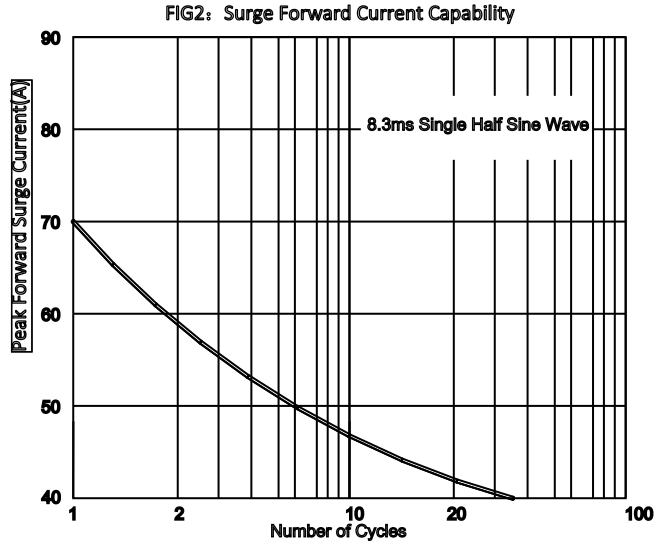
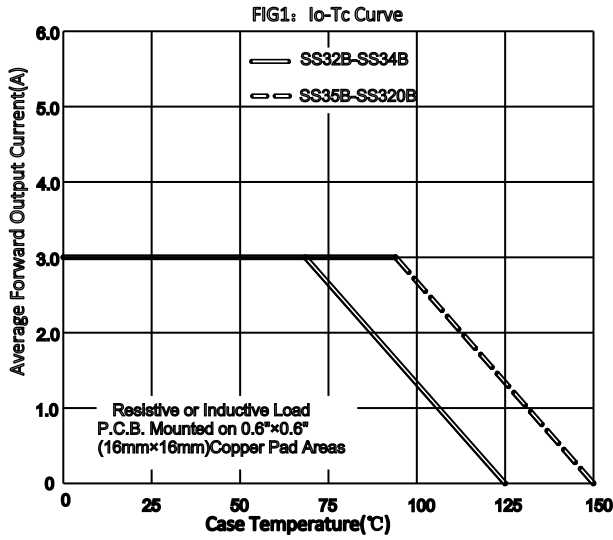
PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS32B	SS33B	SS34B	SS35B	SS36B	SS38B	SS310B	SS315B	SS320B
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =3.0A	0.50			0.70		0.85		0.90	
Maximum DC reverse current at rated DC blocking voltage per diode @ V <sub>RM</sub> =V <sub>RRM</sub>	I <sub>RRM</sub>	mA	Ta=25°C	0.50				0.10				
			Ta=100°C	10				5				

### THERMAL CHARACTERISTICS (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS32B	SS33B	SS34B	SS35B	SS36B	SS38B	SS310B	SS315B	SS320B
Thermal resistance	R <sub>θJA</sub>	°C/W	55 <sup>1)</sup>								
	R <sub>θJC</sub>		20 <sup>1)</sup>								

Note:  
(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16mm) copper pad areas

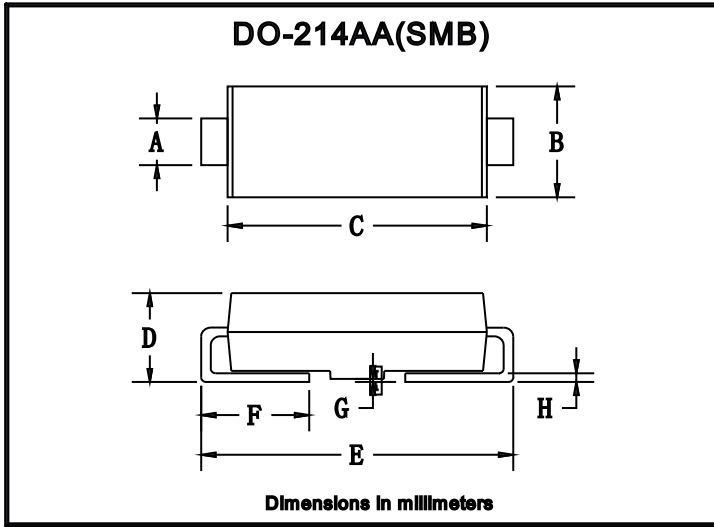
### CHARACTERISTICS (TYPICAL)



### PACKAGING INFORMATION

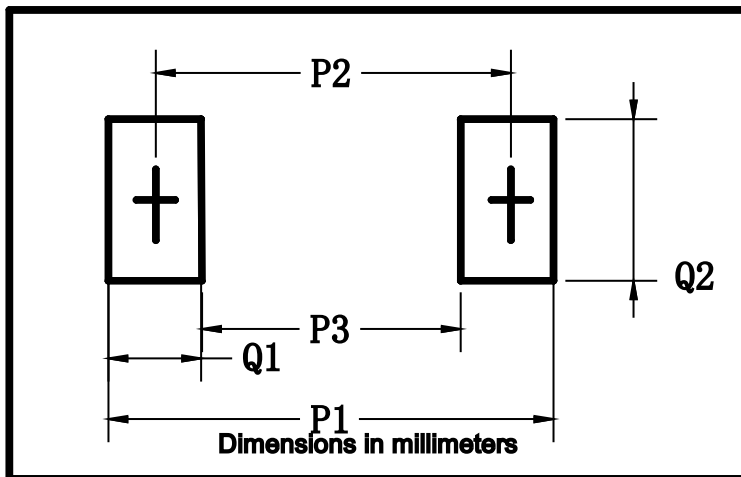
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS32B-SS320B	F1	Approximate 0.096	3000	6000	48000	13" reel
SS32B-SS320B	F2	Approximate 0.096	750	3000	24000	7" reel
SS32B-SS320B	F3	Approximate 0.096	500	2000	16000	7" reel

■ **OUTLINE DIMENSIONS**



DO-214AA(SMB)		
Dim	Min	Max
A	1.85	2.15
B	3.30	3.94
C	4.05	4.75
D	1.99	2.61
E	5.21	5.59
F	0.90	1.41
G	0.10	0.20
H	0.15	0.31

■ **SUGGESTED PAD LAYOUT**



DO-214AA(SMB)	
Dim	Millimeters
P1	6.8
P2	4.3
P3	1.8
Q1	2.5
Q2	2.3