

## Surface Mount Schottky Rectifier

### Features

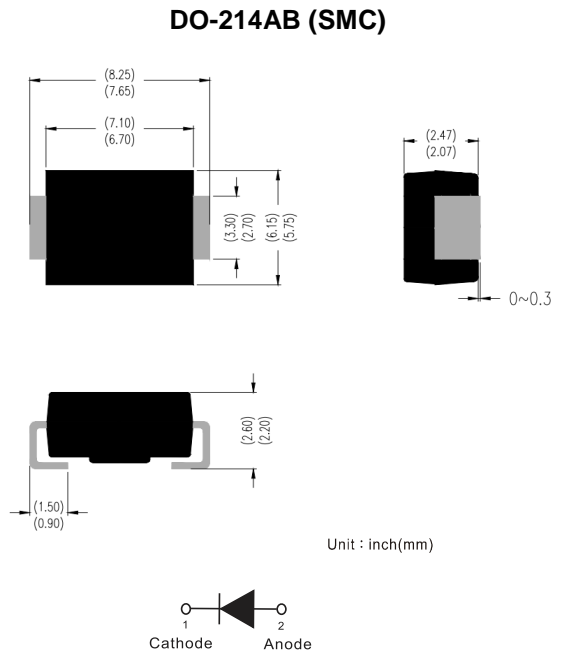
- Guardring for overvoltage protection
- Low power losses
- Extremely fast switching
- High forward surge capability
- High frequency operation
- Solder dip 260 °C max. 10s, per JESD 22-B106

### Typical Applications

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

### Mechanical Data

- **Package:** DO-214AB (SMC)  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes the cathode end



### ■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS32	SS33	SS34	SS35	SS36	SS38	SS310	SS315	SS320	
Repetitive Peak Reverse Voltage	$V_{RRM}$	V	20	30	40	50	60	80	100	150	200	
Average Rectified Output Current @60Hz sine wave, Resistance load, Ta (FIG.1)	$I_O$	A	3.0									
Forward Surge Current (Non-repetitive) @ 60Hz Half-sine wave, 1 cycle, Ta=25°C	$I_{FSM}$	A	70									
Storage Temperature	$T_{stg}$	°C	-55 ~+150									
Junction Temperature	$T_j$	°C	-55 ~+150					-55 ~+175				

### ■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	SS32	SS33	SS34	SS35	SS36	SS38	SS310	SS315	SS320
Maximum instantaneous forward voltage drop per diode	$V_F$	V	$I_{FM}=3.0A$	0.55			0.70		0.85		0.95	
Maximum DC reverse current at rated DC blocking voltage per diode	$I_R$	mA	Ta=25°C	0.5					0.10			
			Ta=100°C	10					5.0			

■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	SS32	SS33	SS34	SS35	SS36	SS38	SS310	SS315	SS320
Thermal Resistance	Junction to ambient	R <sub>θJ-A</sub>	°C/W	55 <sup>(1)</sup>								
	Junction to lead	R <sub>θJ-L</sub>		17 <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 16 mm) copper pad areas

■ Characteristics(Typical)

FIG.1: I<sub>o</sub>-T<sub>a</sub> Curve

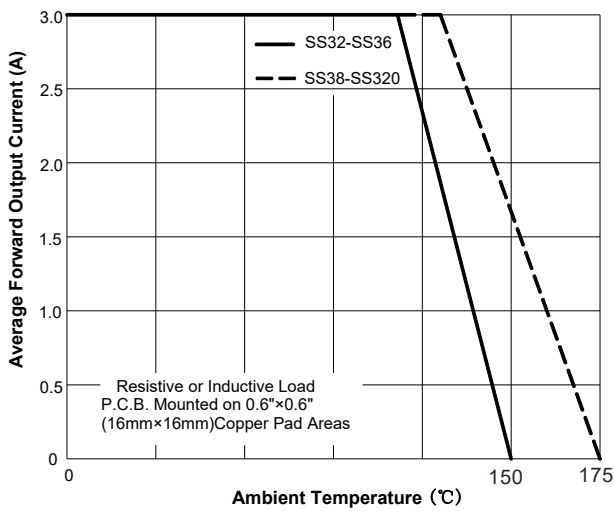


FIG.2: Forward Surge Current Capability

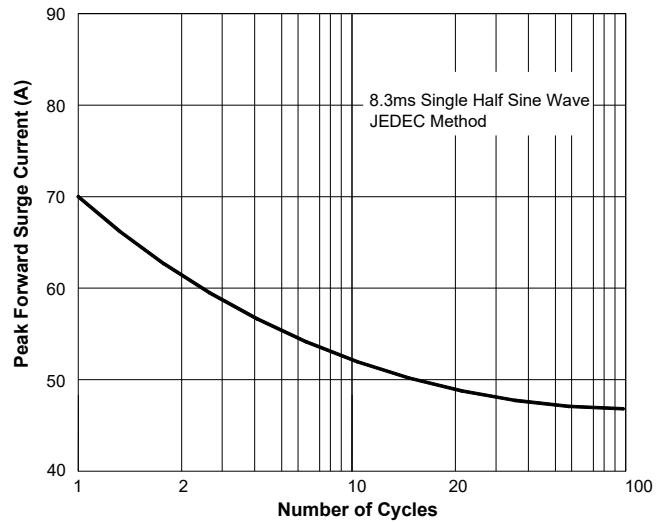


FIG.3: Forward Voltage

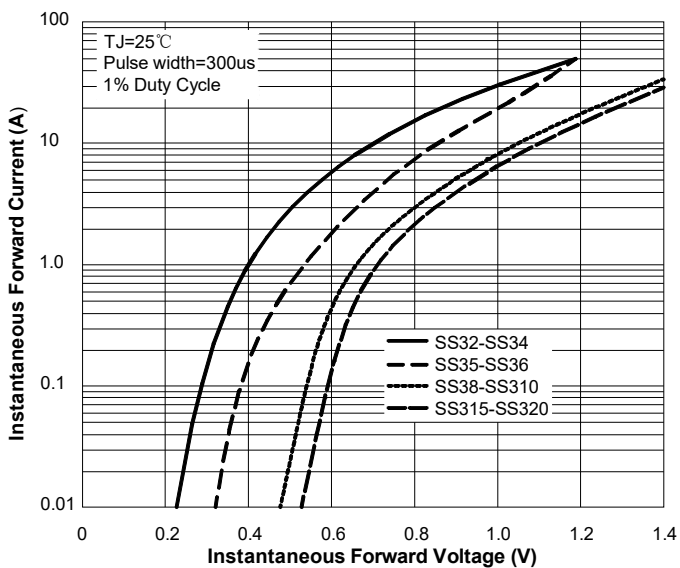


FIG4: Typical Reverse Characteristics

