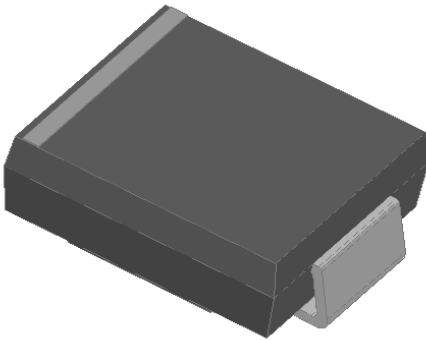


## Surface Mount Schottky Rectifier

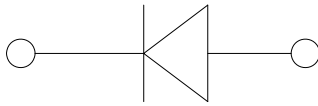


### Features

- 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 (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS32	SS33	SS34	SS35	SS36	SS38	SS310	SS315	SS320
Device marking code			SS32	SS33	SS34	SS35	SS36	SS38	SS310	SS315	SS320
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, T <sub>a</sub> (FIG.1)	I <sub>O</sub>	A	3.0								
Forward Surge Current (Non-repetitive) @ 60Hz Half-sine wave, 1 cycle, T <sub>a</sub> =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 (T<sub>a</sub>=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 <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	I <sub>R</sub>	mA	T <sub>a</sub> =25°C	0.5					0.10			
			T <sub>a</sub> =100°C	10					5.0			

Note1:Pulse test:300uS pulse width,1% duty cycle

Note2:Pulse test:pulse width 40mS



# SS32 THRU SS320

## ■ 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

## ■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
SS32~SS320	F1	Approximate 0.248	3000	/	42000	13" reel

## ■ Characteristics(Typical)

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

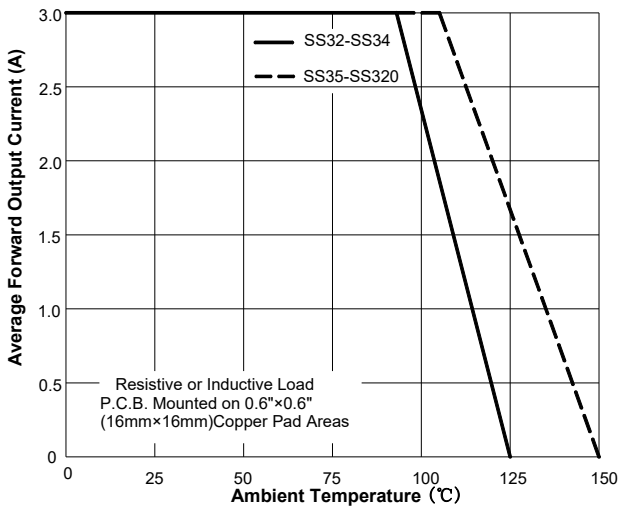


FIG.2: Forward Surge Current Capability

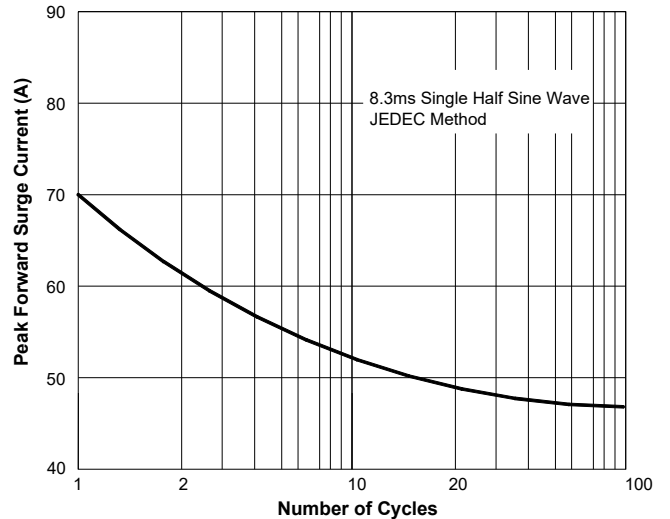


FIG.3: Forward Voltage

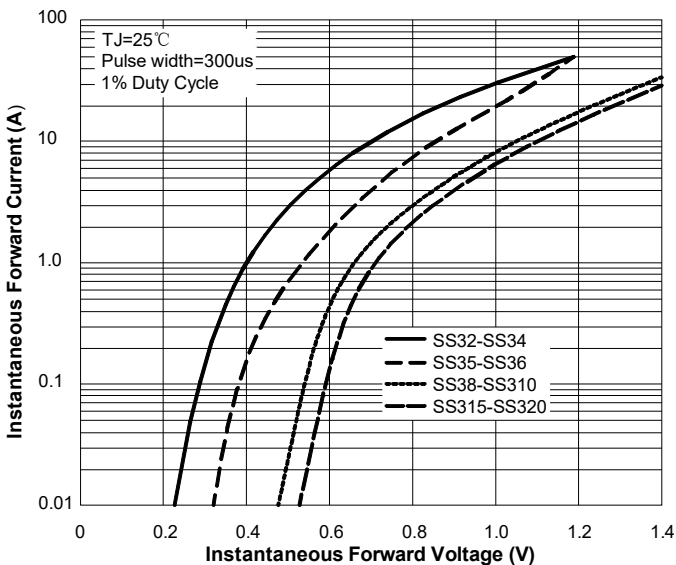
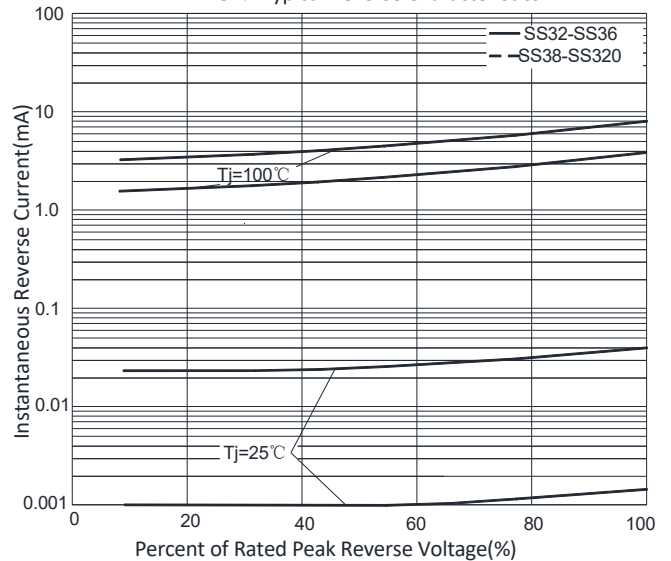
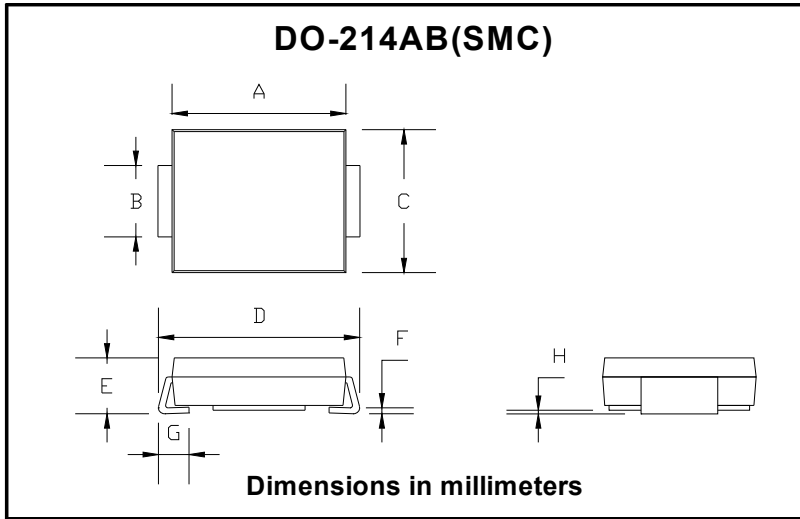


FIG.4: Typical Reverse Characteristics



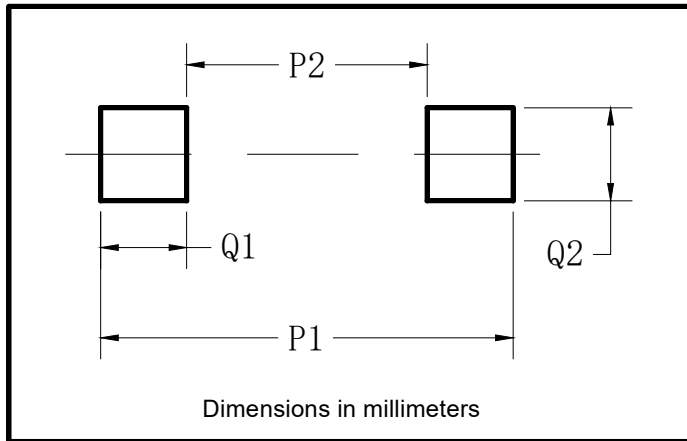


## ■ Outline Dimensions



DO-214AB (SMC)		
Dim	Min	Max
A	6.60	7.11
B	2.85	3.27
C	5.59	6.22
D	7.75	8.13
E	1.99	2.61
F	0.15	0.31
G	0.76	1.52
H	0.05	0.20

## ■ Suggested pad layout



Dim	Typ
P1	9.9
P2	3.84
Q1	3.03
Q2	3.82



## SS32 THRU SS320

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