

Schottky rectifier

SS32A~SS320A

20 to 200V

3A

DO-214AC(SMA)

Features

- ◆ Guardring for overvoltage protection
- ◆ Very small conduction losses
- ◆ Extremely fast switching
- ◆ Low forward voltage drop
- ◆ For surface mounted applications
- ◆ Solder dip 260 °C, 40 s
- ◆ Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



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Mechanical Date

- ◆ **Case:** JEDEC DO-214AC molded plastic body
- ◆ **Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026
- ◆ **Polarity:** Color band denotes cathode end
- ◆ **Mounting Position:** Any
- ◆ **Weight:** 0.07 grams

Primary Characteristics

$I_{F(AV)}$	3.0A
V_{RRM}	20 V to 200 V
I_{FSM}	100A
V_F	0.45V, 0.55V, 0.70V, 0.85V, 0.95V
$T_{j\ max.}$	125°C

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Maximum Ratings & Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbol	SS32A	SS33A	SS34A	SS35A	SS36A	SS38A	SS310A	SS315A	SS320A	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum average forward rectified current	$I_{(AV)}$	3.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100									A
Maximum instantaneous forward voltage at 3.0A	V_F	0.45	0.55	0.70			0.85		0.95	V	
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^\circ\text{C}$	0.5							0.2		mA
	$T_A=100^\circ\text{C}$	20					10		2		
Typical junction capacitance ^①	C_J	500.0				300.0				pF	
Typical thermal resistance ^②	$R_{\theta JA}$	88.0									°C/W
Operating junction temperature range	T_J	-65 to +125					-65 to +150				°C
Storage temperature range	T_{STG}	-65 to +150									°C

Note: ① Measured at 1MHz and applied reverse voltage of 4.0V D.C.

② Mounted on 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas.

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig1. Forward Current Derating Curve

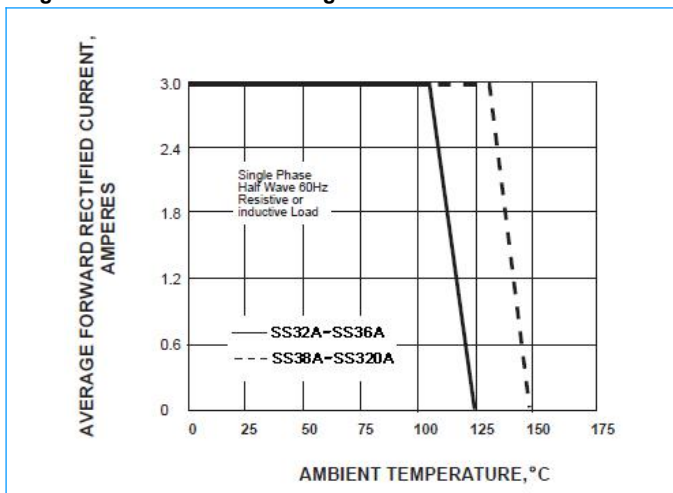
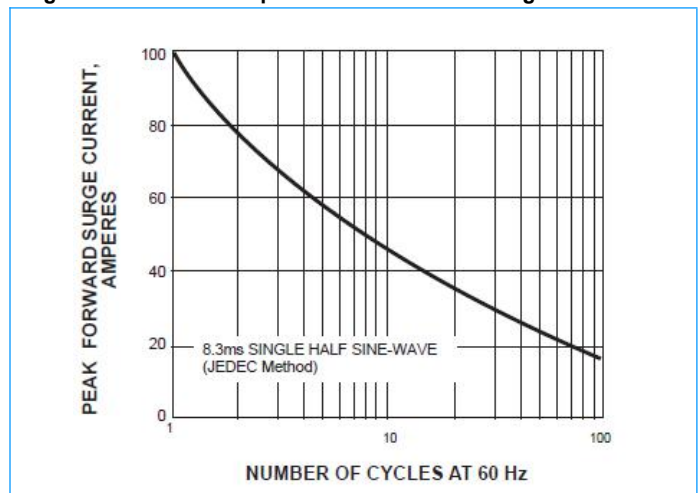


Fig2. Maximum Non-Repetitive Peak Forward Surge Current



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Fig3. Typical Instantaneous Forward Characteristics

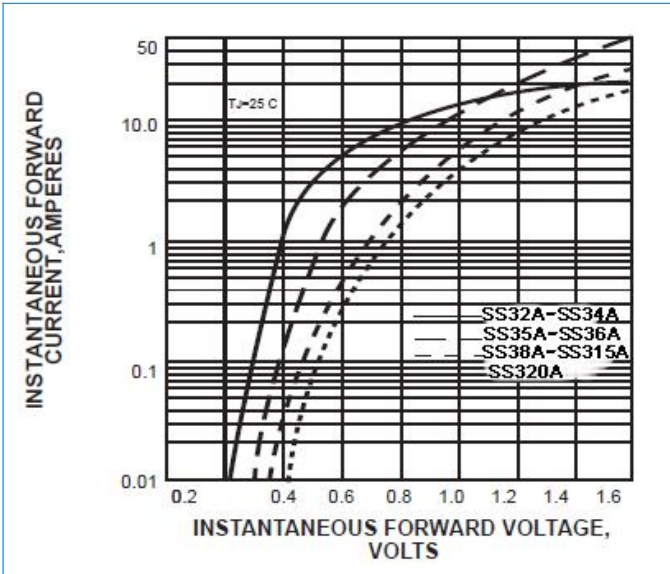
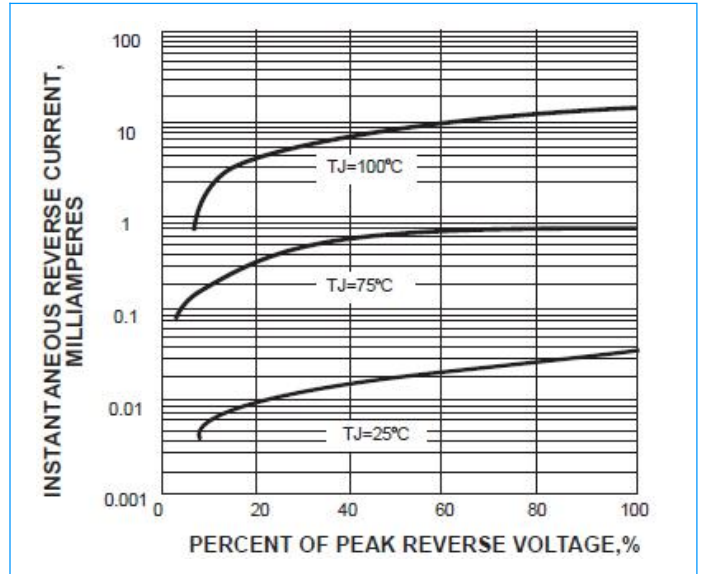
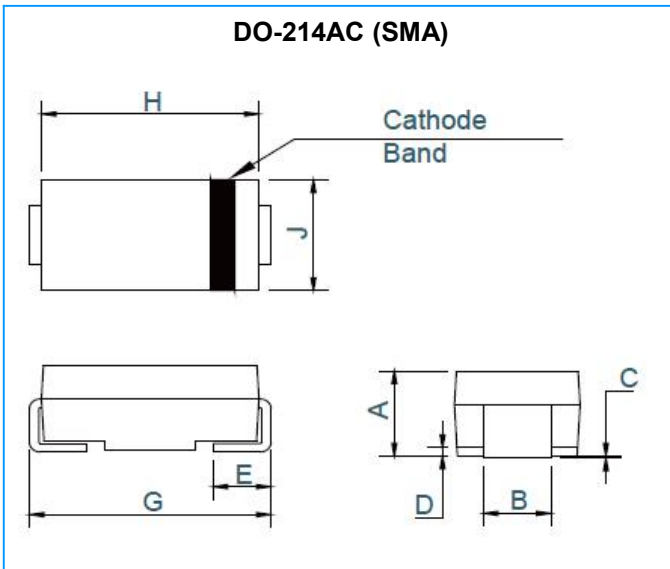


Fig4. Typical Reverse Characteristics



Dimensions



Dimensions				
Dim	Inches		Millimeters	
	Min	Max	Min	Max
A	0.067	0.093	1.7	2.36
B	0.049	0.067	1.25	1.7
C	0.002	0.008	0.05	0.2
D	--	0.02	--	0.51
E	0.03	0.06	0.76	1.52
G	0.185	0.209	4.7	5.31
H	0.157	0.185	4	4.7
J	0.086	0.11	2.18	2.8