

SM320A thru SM3100A

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low power loss, high efficiency
- * For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- * Guardring for over voltage protection
- * High temperature soldering guaranteed: 260°C/10 seconds at terminals

Mechanical Data

Case: JEDEC DO-214AC, molded plastic over glass body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.0028 oz., 0.08 g
Handling precaution: None

Schottky Barrier Rectifiers

Reverse Voltage 20 to 100V
Forward Current 3.0A



We declare that the material of product compliance with RoHS requirements.

Electrical Characteristic

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SM 320A	SM 330A	SM 340A	SM 350A	SM 360A	SM 380A	SM 3100A	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum average forward rectified current 0.375" (9.5mm) lead length (See fig. 1)	$I_F(AV)$	3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100							A
Typical thermal resistance (Note 1)	$R_{\theta JA}$	50							°C/W
Operating junction and storage temperature rang	TJ, TSTG	-40 to +125							°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	SM 320A	SM 330A	SM 340A	SM 350A	SM 360A	SM 380A	SM 3100A	Unit	
Maximum instantaneous forward voltage at 3.0A	V _F	0.50			0.70		0.85		V	
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TA = 100°C	IR	0.5 10.0								mA
Typical junction capacitance at 4.0V, 1MHz	CJ	110								PF

NOTES:

1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

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Ratings and Characteristic Curves

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

Fig. 1 - Forward Current Derating Curve

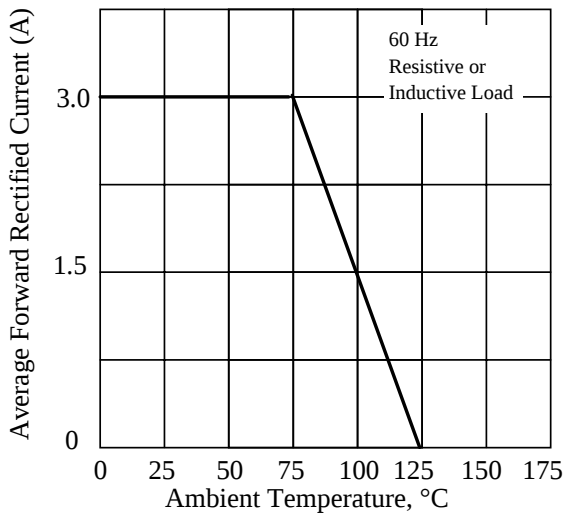


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

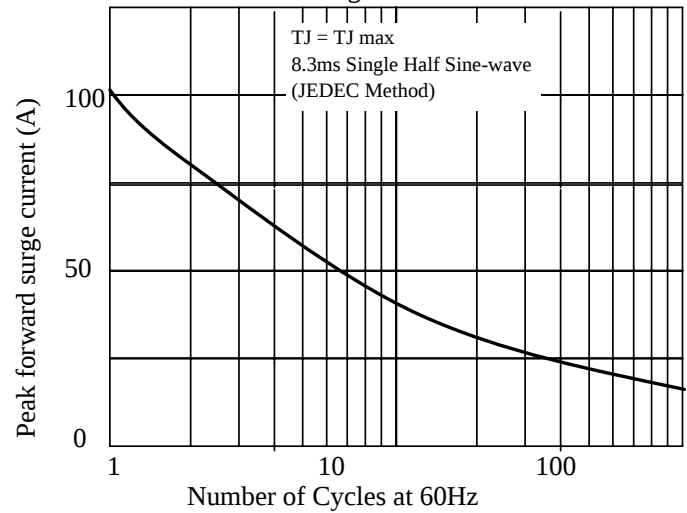


Fig. 3 - Typical Instantaneous Forward Characteristics

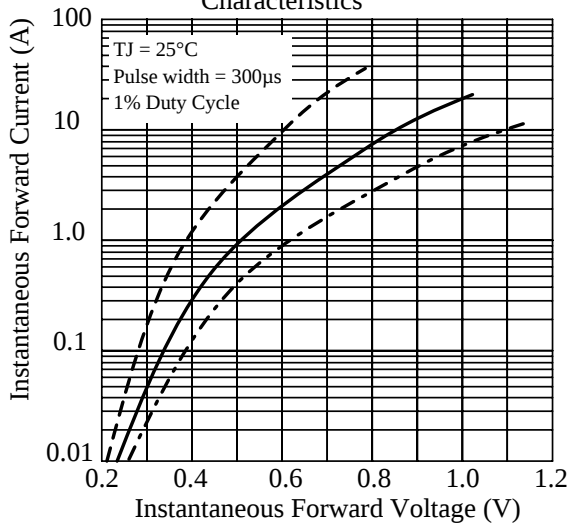


Fig. 4 - Typical Reverse Characteristics

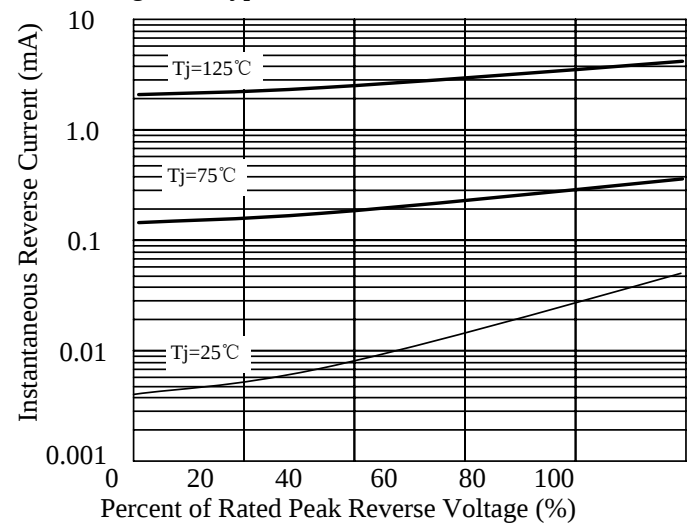


Fig. 5 - typical transient thermal impedance

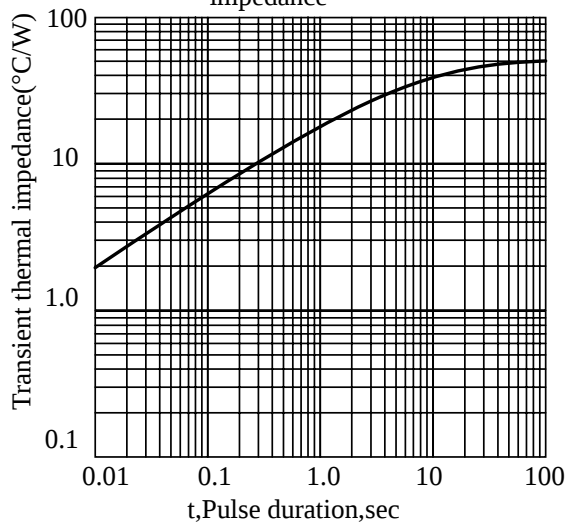
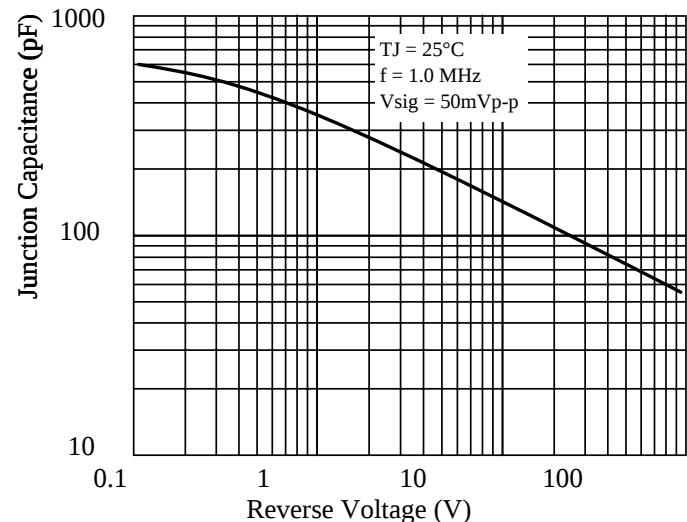
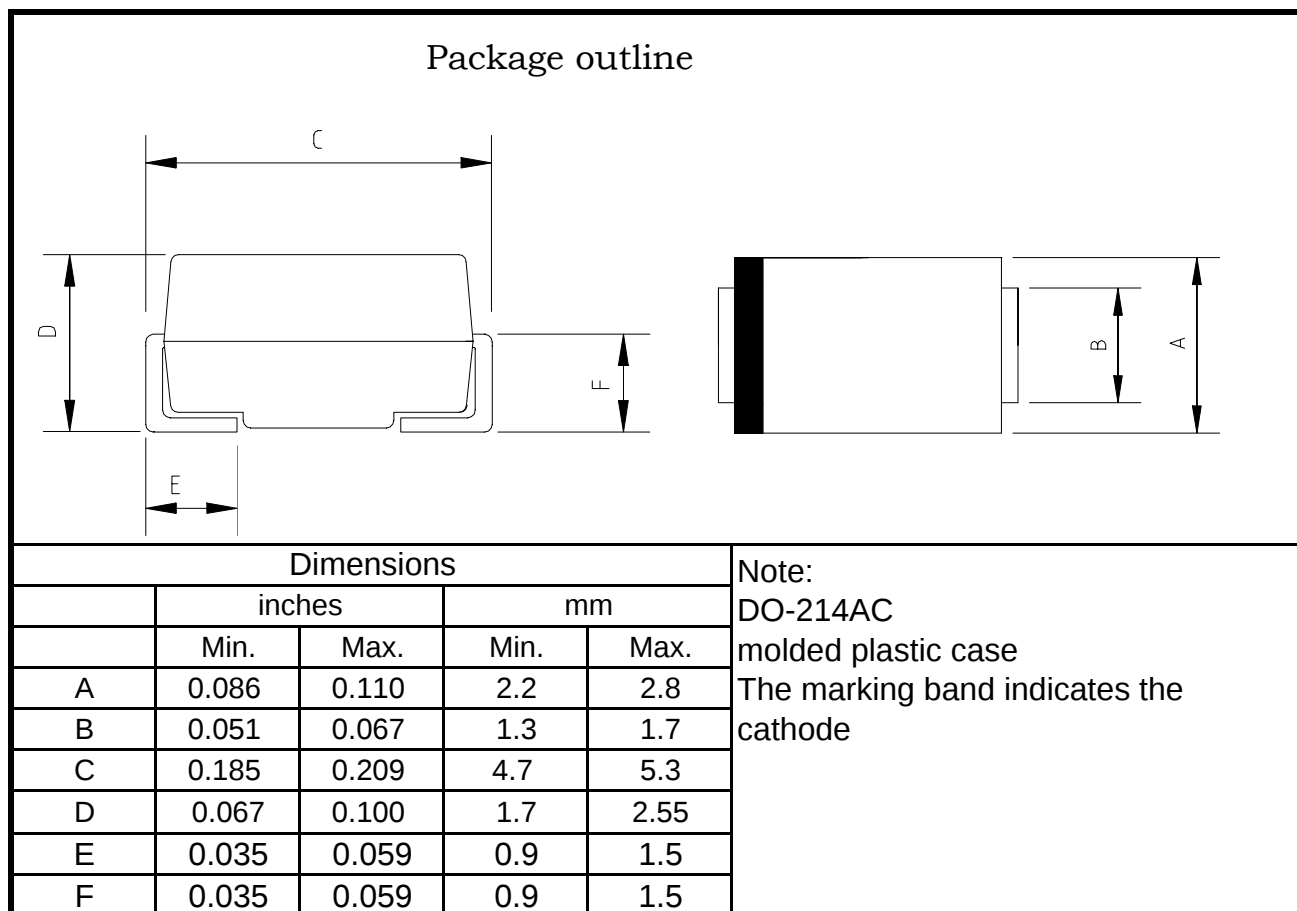


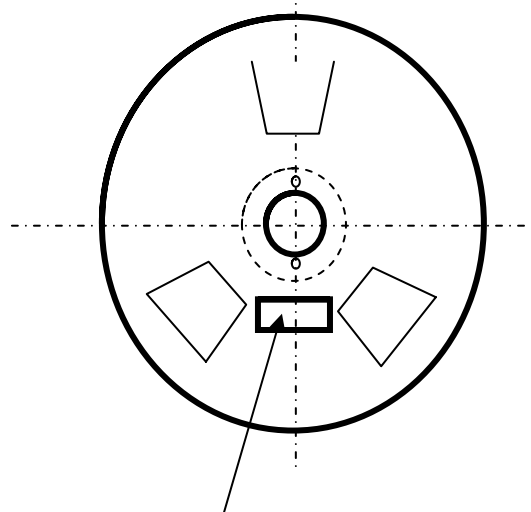
Fig. 6 - Typical Junction Capacitance



Package Dimensions in inches and (millimeters)


SMA Packing Specification

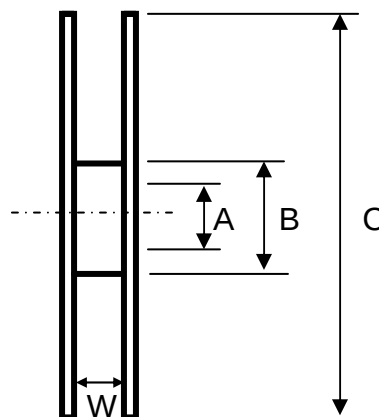
1. 卷盘规格/Reel Packing



Label stike this position

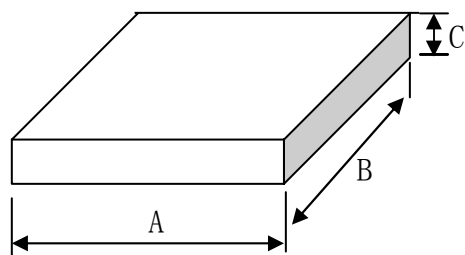
Item	Q'ty/Taping
7"	2K
13"	5K

Unit:mm



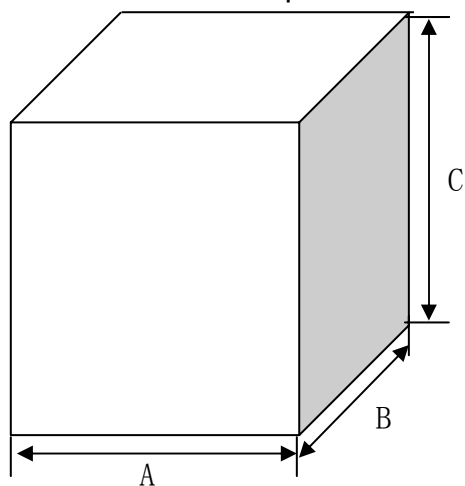
Item	Symbol	Dimension
13" Size	A	13.0±0.2
	B	75.0±0.5
	C	330±1.0
	W	13.2±1.0
7" Size	A	13.0±0.2
	B	54±0.5
	C	177±1.0
	W	13.2±1.0

2. 内箱规格/ Inside Box Specification



Item	Symbol	Dimension
Size	A	335±2
	B	335±2
	C	40±1

3. 外箱规格/Outer Box Specification



Item	Symbol	Dimension
Size	A	350±2
	B	350±2
	C	345±2