



ESD



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PLED

B320A-13-F-MS THRU B3100A-13-F-MS

Product specification

VOLTAGE RANGE: 20 - 100V
CURRENT: 3.0 A
FEATURES

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O

MECHANICAL DATA

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Weight: 0.064 grams (approx.)

Marking

B320A-13-F-MS	B330A-13-F-MS	B340A-13-F-MS	B350A-13-F-MS
MSKSEMI B320A	MSKSEMI B330A	MSKSEMI B340A	MSKSEMI B350A
B360A-13-F-MS	B380A-13-F-MS	B390A-13-F-MS	B3100A-13-F-MS
MSKSEMI B360A	MSKSEMI B380A	MSKSEMI B390A	MSKSEMI B3100A

Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	B320A-13-F-MS	B330A-13-F-MS	B340A-13-F-MS	B350A-13-F-MS	B360A-13-F-MS	B380A-13-F-MS	B390A-13-F-MS	B3110A-13-F-MS	Unit
Peak Repetitive Reverse Voltage	VR _{RRM}									
Working Peak Reverse Voltage	VR _{WM}	20	30	40	50	60	80	90	100	V
DC Blocking Voltage	V _R									
RMS Reverse Voltage	V _R (RMS)	14	21	28	35	42	56	64	71	V
Average Rectified Output Current @ $T_L = 105^\circ\text{C}$	I _O									A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}									A
Forward Voltage @ $I_F = 2.0\text{A}$	V _{FM}	0.55		0.70		0.85				V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I _{RM}			1.0		20				mA
Typical Thermal Resistance (Note 1)	R _{θ JL} R _{θ JA}			10		50				°C/W
Operating Temperature Range	T _j			-65 to +125						°C
Storage Temperature Range	T _{STG}			-65 to +150						°C

Reference News

SMA/DO-214AC	Schematic Diagram

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

RATINGS AND CHARACTERISTIC CURVES
B320A-13-F-MS THRU B3100A-13-F-MS

FIG. 1-FORWARD CURRENT DERATING CURVE

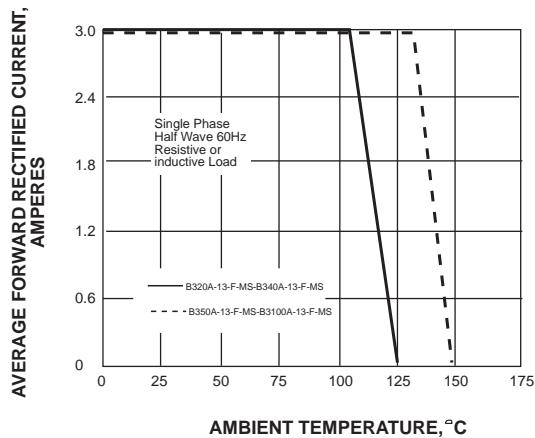


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

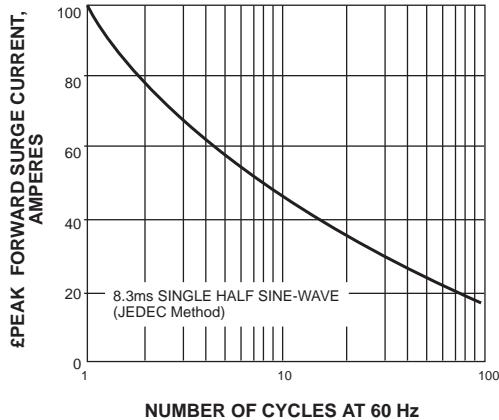


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

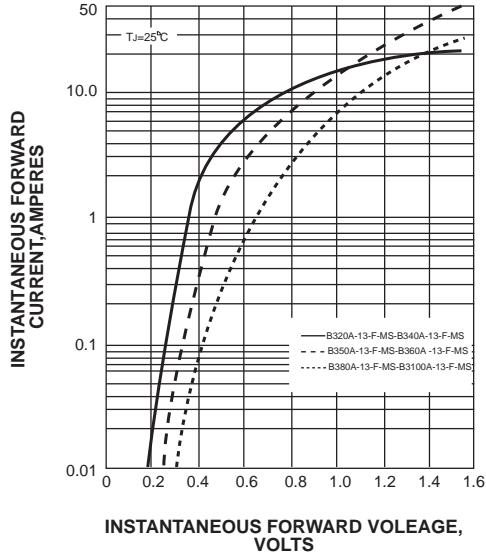


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

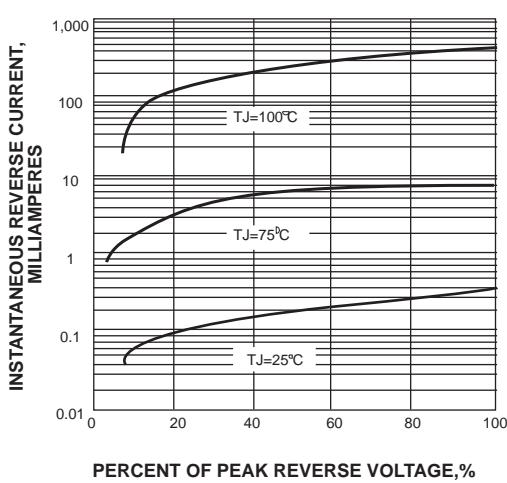


FIG. 5-TYPICAL JUNCTION CAPACITANCE

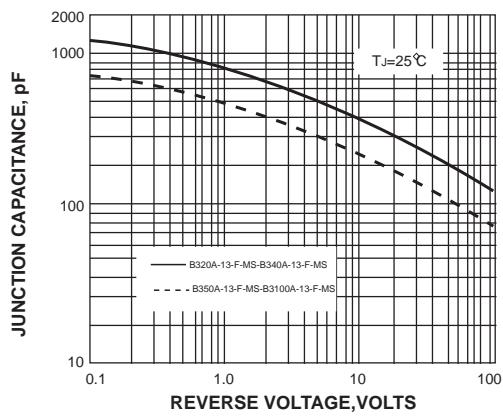
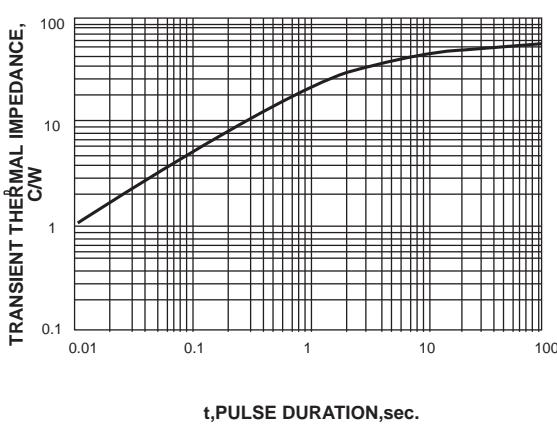
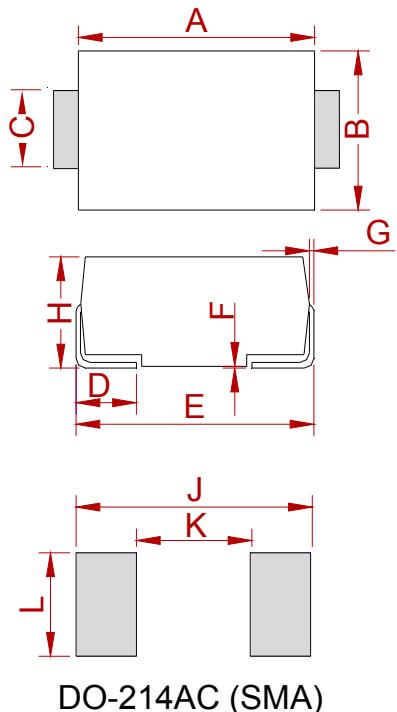


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



PACKAGE MECHANICAL DATA


Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.25	4.65	0.167	0.183
B	2.50	2.90	0.098	0.114
C	1.35	1.65	0.053	0.065
D	0.76	1.52	0.030	0.060
E	4.93	5.28	0.194	0.208
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
H	1.98	2.41	0.078	0.095
J	6.50		0.256	
K		2.30		0.090
L	1.70		0.067	

REEL SPECIFICATION

P/N	PKG	QTY
B320A-13-F-MS THRU B3100A-13-F-MS	SMA	2000

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