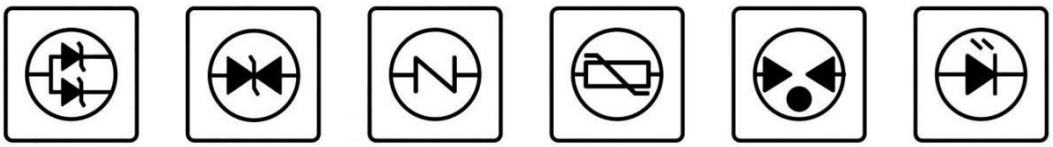
MSKSEMI 美森科
SEMICONDUCTOR



B320B-13-F(MS) THRU B3A0B-13-F(MS)

Product specification

B320B-13-F(MS) THRU B3A0B-13-F(MS)

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction,majority carrier conduction
- Low power loss,high efficiency
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250℃/10 seconds at terminals

Mechanical Data

- **Case**: JEDEC DO-214AA molded plastic body
- **Terminals**: leads solderable per MIL-STD-750,
- Method 2026
- **Polarity**: Color band denotes cathode end
- **Mounting Position**: Any
- **Weight**:0.003 ounce, 0.093 grams

Reference News

Outline	Marking						
	B320B	B330B	B340B	B350B	B360B	B380B	B3A0B
SMB	B320B-13-F(MS)	B330B-13-F(MS)	B340B-13-F(MS)	B350B-13-F(MS)	B360B-13-F(MS)	B380B-13-F(MS)	B3A0B-13-F(MS)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

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

YFW Catalog Number	SYMBOLS	B320B-13-F(MS)	B330B-13-F(MS)	B340B-13-F(MS)	B350B-13-F(MS)	B360B-13-F(MS)	B380B-13-F(MS)	B3A0B-13-F(MS	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	VOLTS
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	VOLTS
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	VOLTS
Maximum average forward rectified current at T_L(see fig.1)	$I_{(AV)}$	3.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100.0							Amps
Maximum instantaneous forward voltage at 3.0A	V_F	0.55			0.70		0.85		Volts
Maximum DC reverse current at rated DC blocking voltage T_A=25℃	I_R	0.5							mA
T_A=100℃		20					10		
Typical junction capacitance (NOTE 1)	C_J	500			300				pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	55.0							°C/W
Operating junction temperature range	$T_{J,}$	-50 to +125					-50 to +150		°C
Storage temperature range	T_{STG}	-50 to +150							°C

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C. 2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

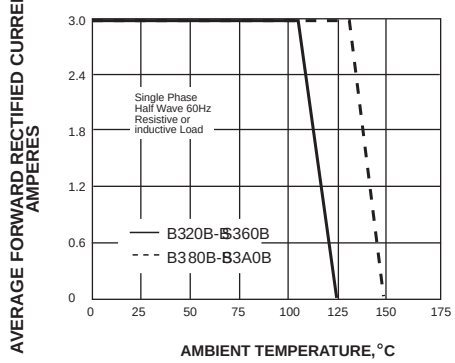


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

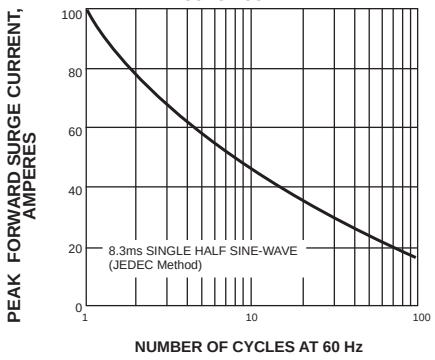


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

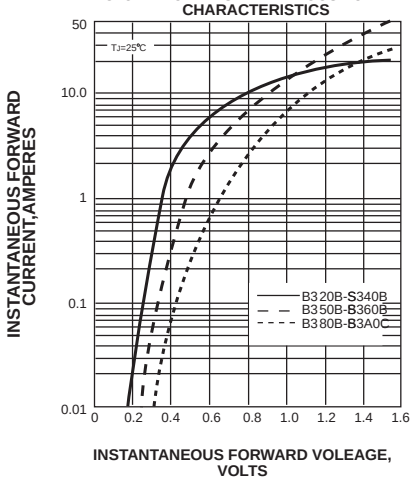


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

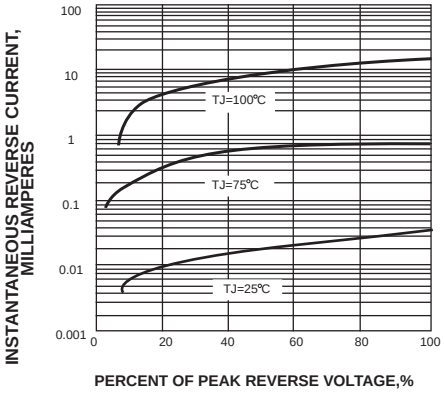


FIG. 5-TYPICAL JUNCTION CAPACITANCE

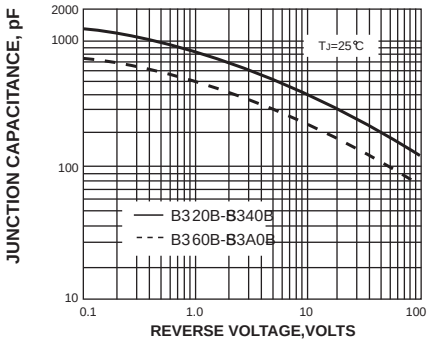
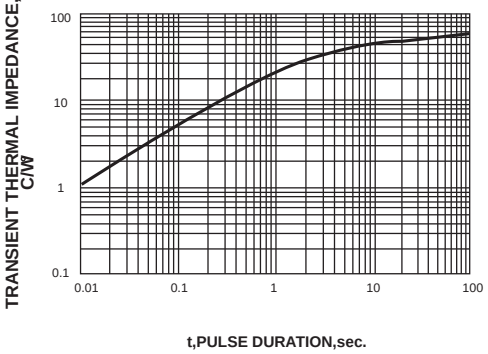
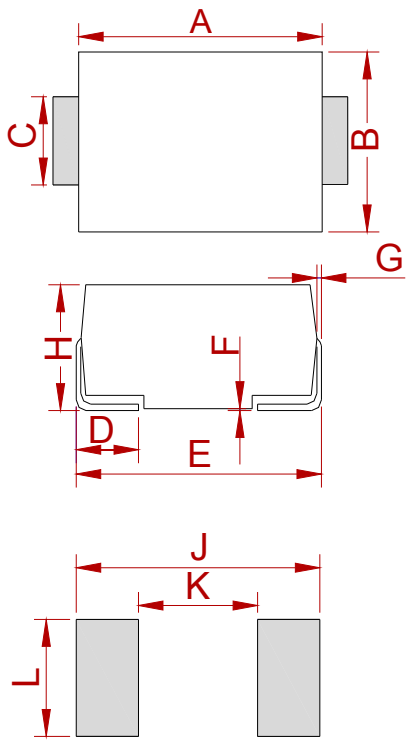


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



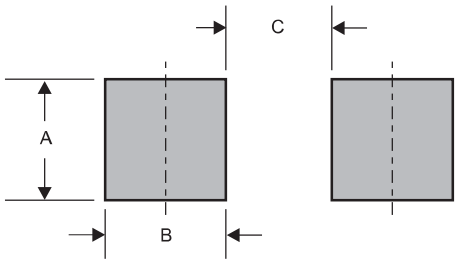
PACKAGE MECHANICAL DATA



DO-214AA (SMB)

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.25	4.75	0.167	0.187
B	3.30	3.94	0.130	0.155
C	1.85	2.21	0.073	0.087
D	0.76	1.52	0.030	0.060
E	5.08	5.59	0.200	0.220
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
H	2.11	2.44	0.083	0.096
J	6.80		0.270	
K		2.60		0.100
L	2.40		0.090	

Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SMB	0.078 (2.00)	0.059 (1.50)	0.110 (2.80)

REELSPECIFICATION

P/N	PKG	QTY
B230-13-F(MS) THRU B2200B-13-F(MS)	SMB	2500

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