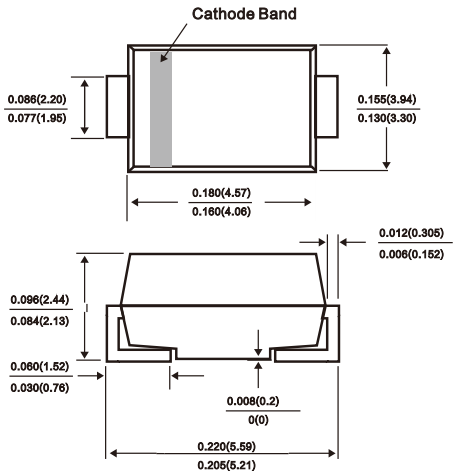
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief, ideal for automated placement
- Glass passivated chip junction
- High temperature soldering: 250°C/10 seconds at terminals

SMB(DO-214AA)



Dimensions in inches and (millimeters)

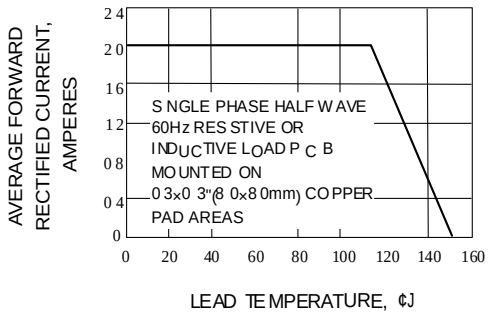
MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic over passivated chip
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Weight: 0.002 ounce, 0.064 gram

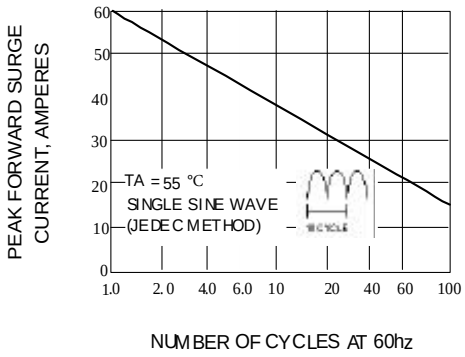
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	S2A	S2B	S2D	S2G	S2J	S2K	S2M	Unit
Peak Repet tive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @T_L = 110°C	I_O	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60							A
Forward Voltage @I_F = 2.0A	V_{FM}	1.10							V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_{RM}	5.0 200							µA
Reverse Recovery Time (Note 1)	t_{rr}	2.5							µS
Typical Junction Capacitance (Note 2)	C_j	30							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$	16							K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150							°C

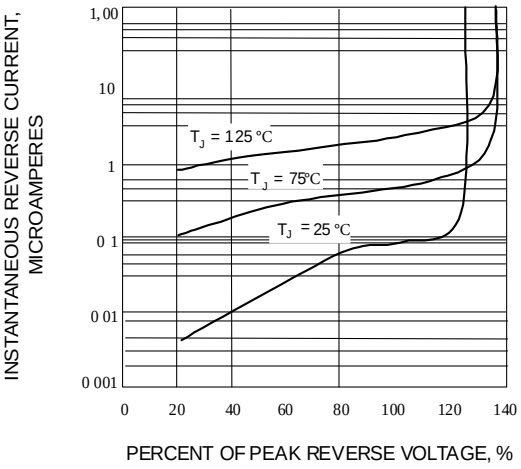
Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A,
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
3. Mounted on P.C. Board with 8.0mm^2 land area.



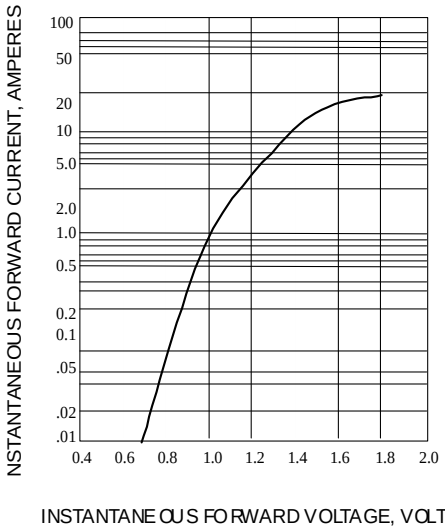
F g. 1-FORWARD CURRENT DERATING CURVE



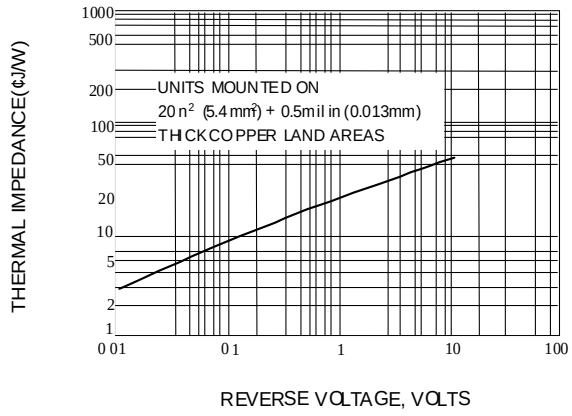
F g. 2-MAX MUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



F g. 3-TYPICAL REVERSE CHARACTERISTICS



F g. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F g. 5 TRANSIENT THERMAL IMPEDANCE

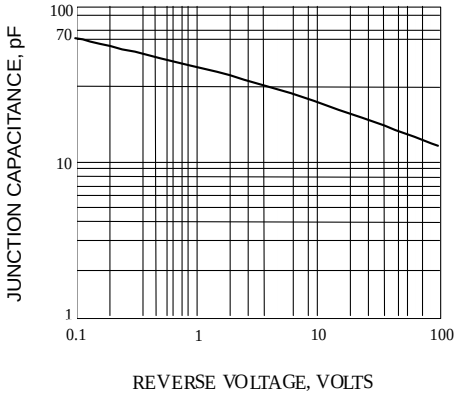


Fig. 6 TYP CAL JUNCTION CAPACITANCE