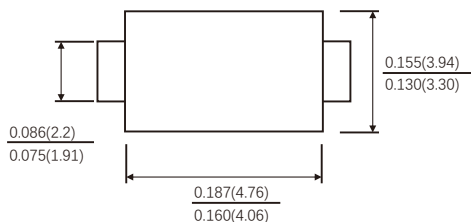


FEATURES

- Glass passivated cavity-free junction
- Ideal for surface mount automotive applications
- Ultrafast recovery time for high efficiency
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability
- Classification 94V-0
- Lead (Pb)-free component
- Component in accordance to RoHS 2011/65/EU
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

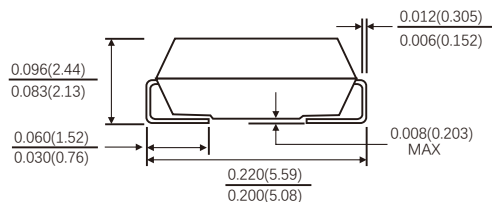


SMB(DO-214AA)



MECHANICAL DATA

- Case: JEDEC SMB(DO-214AA) molded plastic body
- Terminals: Solder Plated, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified, Single phase, half wave, 60HZ, resistive or inductive load.
For capacitive load, derate current by 20%.)

Parameter/s	Symbols	ES2					Units
		AB	BB	DB	GB	JB	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	Volts
Maximum Average Forward Rectified Current at $T_A \leq 105^\circ\text{C}$	$I_{(AV)}$	2.0					Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50					Amps
Maximum Instantaneous Forward Voltage at 2.0 A	V_F	0.95		1.3		1.7	Volts
Maximum DC Reverse Current At Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	5					μA
	$T_A = 125^\circ\text{C}$	100					
Maximum Reverse Recovery Time(Note1)	T_{rr}	35					ns
Typical Junction Capacitance(Note2)	C_j	25					pF
Typical Thermal Resistance(Note3)	$R_{\theta JA}$	75					$^\circ\text{C/W}$
	$R_{\theta JL}$	20					
Operating Junction and Storage Temperature	T_j, T_{STG}	-55 to +150					$^\circ\text{C}$

Note: 1. Test conditions: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$.

2. Measured at 1MHz and applied reverse voltage of 4.0 Volts.

3. Thermal resistance from junction to ambient P.C.B. mounted on 0.27x0.27"(7.0x7.0mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES ES2AB THRU ES2JB

FIG.1- FORWARD CURRENT DERATING CURVE

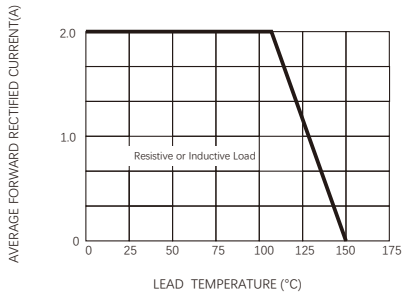


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

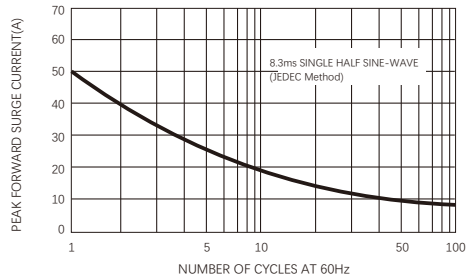


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

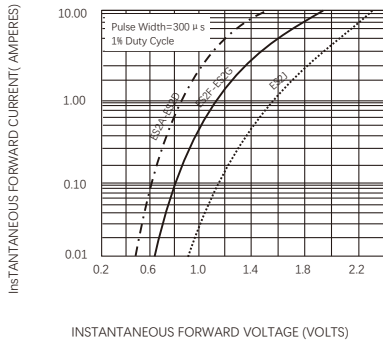


FIG.4-TYPICAL REVERSE CHARACTERISTICS

