

FEATURES

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Alcohol, Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

Case: JEDEC DO-214AA, molded plastic

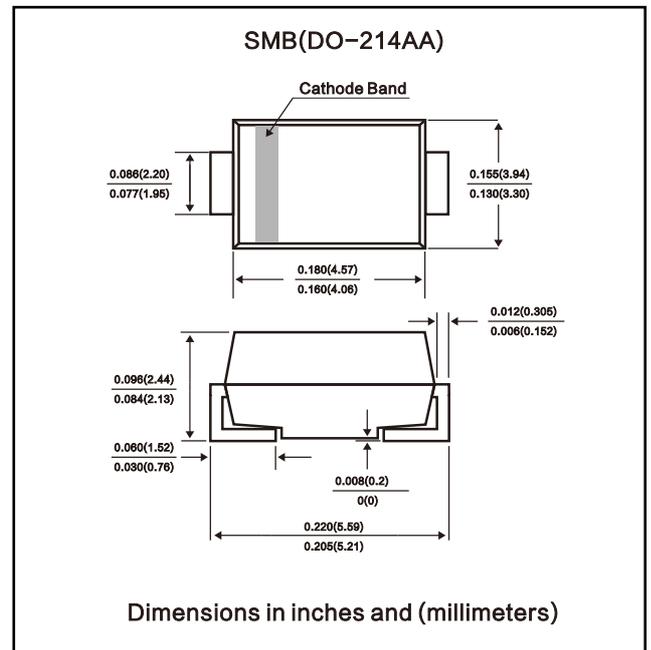
Terminals: Solderable per

MIL- STD-202, Method 208

Polarity: Color band denotes cathode

Weight: 0.007 ounces, 0.21 grams

Mounting position: Any



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%

CHARACTERISTICS	SYMBOL	ES3A	ES3B	ES3D	ES3G	ES3J	ES3K	ES3M	UNIT	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current @ $T_A=55^\circ\text{C}$	$I_{(AV)}$	3.0							A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I_{FSM}	125							A	
Peak Forward Voltage at 3.0A DC	V_F	0.95		1.25		1.70			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_J=25^\circ\text{C}$ @ $T_J=100^\circ\text{C}$	I_R	5.0							μA	
		100								
Maximum Reverse Recovery Time(Note 1)	T_{RR}	35							nS	
Typical Junction Capacitance (Note2)	C_J	70				45				pF
Typical Thermal Resistance (Note3)	R_{JA}	20							$^\circ\text{C}/\text{W}$	
Operating Temperature Range	T_J	-55 to +150							$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$	

NOTES: 1. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{RR}=0.25\text{A}$

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

3. Thermal resistance junction to ambient.

FIG.1 - FORWARD CURRENT DERATING CURVE

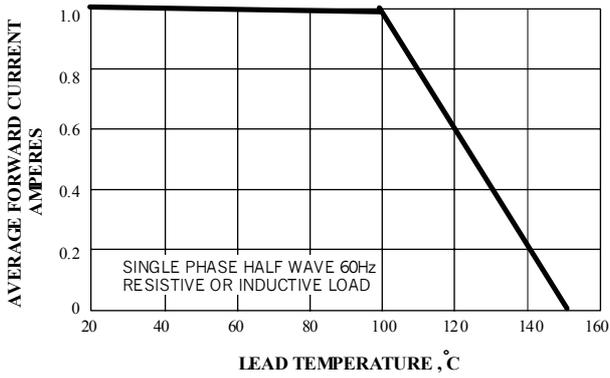


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

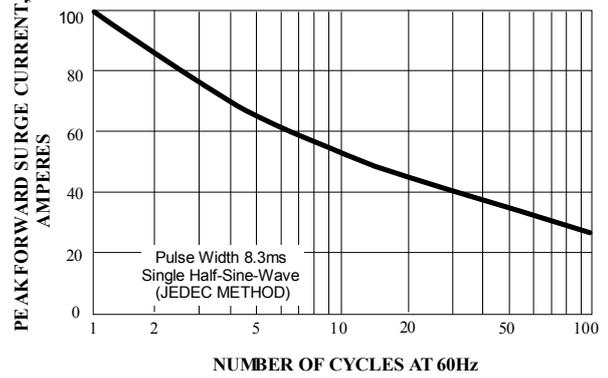


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

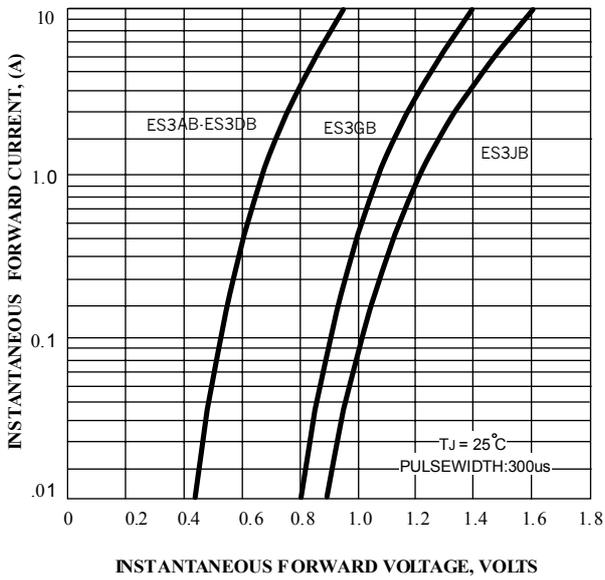


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

