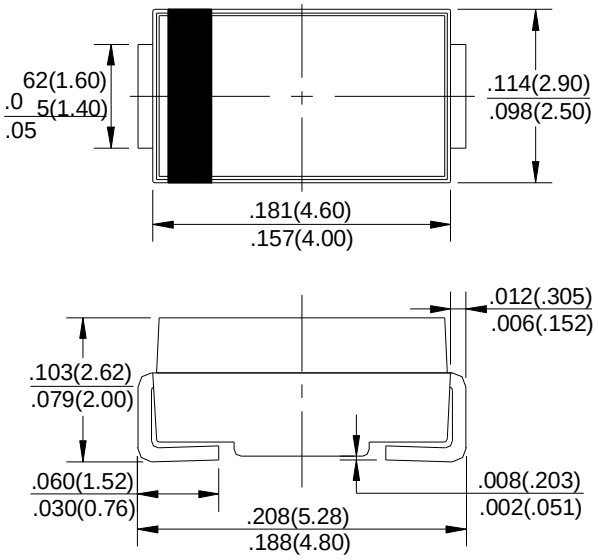
CURRENT 3.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

S3AA THRU S3MA

DO-214AC (SMA)



Dimensions in inches and (millimeters)

FEATURES

Plastic package has underwrites 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 /10 second at terminals

MECHANICAL DATA

Case: JEDED DO-214AC molded plastic over glass passivated chip
Terminals: Solder plated, Solderable per MIL-STD-750, method 2026
Polarity: Color band denotes cathode end
Weight: 0.002ounce, 0.064 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified

	SYMBOLS	S3A	S3B	S3D	S3G	S3J	S3K	S3M	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T_L=100 (NOTE 3)	$I_{(AV)}$	3.0							Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method) T_L=100	I_{FSM}	100							Amps
Maximum Instantaneous Forward Voltage at 3.0A	V_F	1.15							Volts
Maximum DC Reverse Current at rated DC Blocking Voltage T_A = 25	I_R	10.0							A
T_A = 125		250							
Typical Reverse Recovery Time (NOTE 1)	T_{rr}	2							us
Typical junction capacitance (NOTE 2)	C_J	60							pF
Typical Thermal Resistance (NOTE 3)	$R_{\theta JL}$	47							/W
	$R_{\theta JA}$	13							
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to +150							

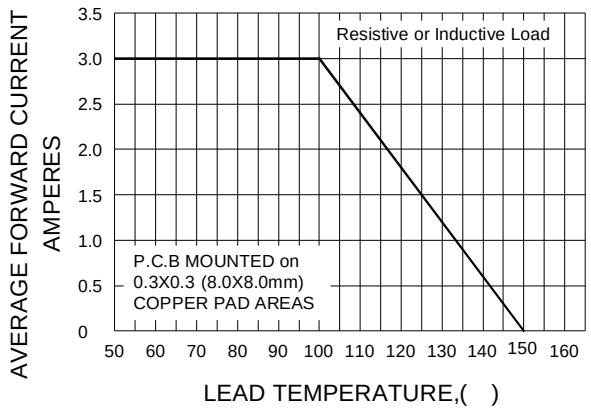
Notes:
1. Reverse recovery test conditions: I_F =0.5A, I_R =1.0A, Irr =0.25A
2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts
3. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B.with 0.3×0.3″ (8.0 × 8.0mm) copper pad areas.

CURRENT 3.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

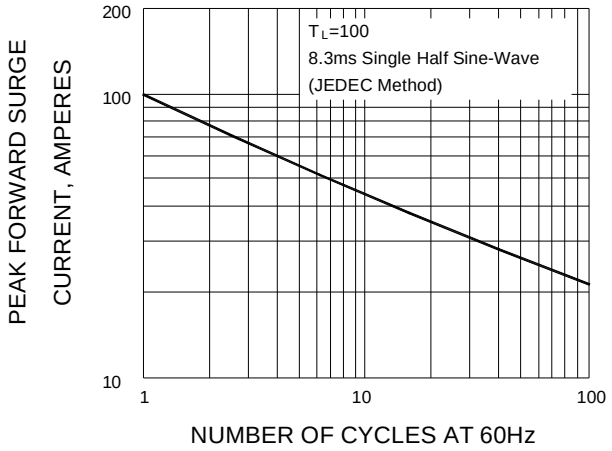
S3AA THRU S3MA

RATING AND CHRACTERISTIC CURVES S3A Thru S3M

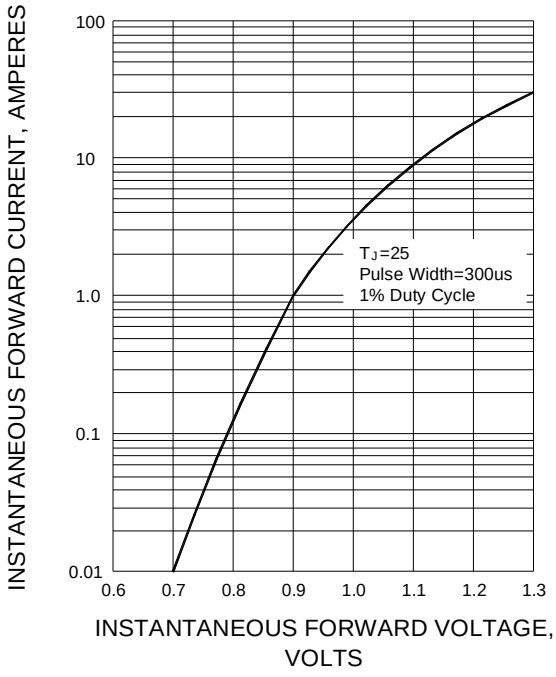
F1G.1-FORWARD CURRENT DERATING CURVE



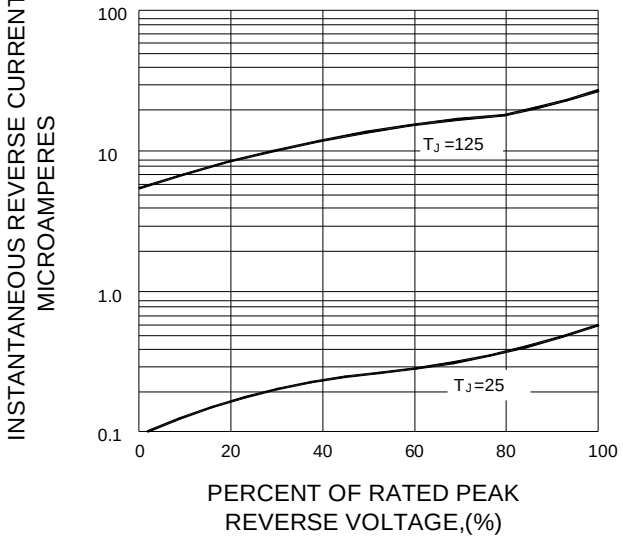
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



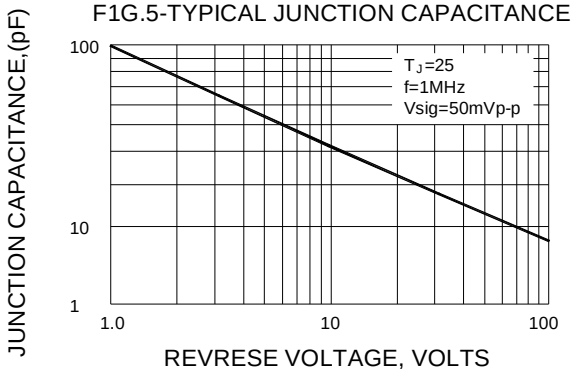
F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE



F1G.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

