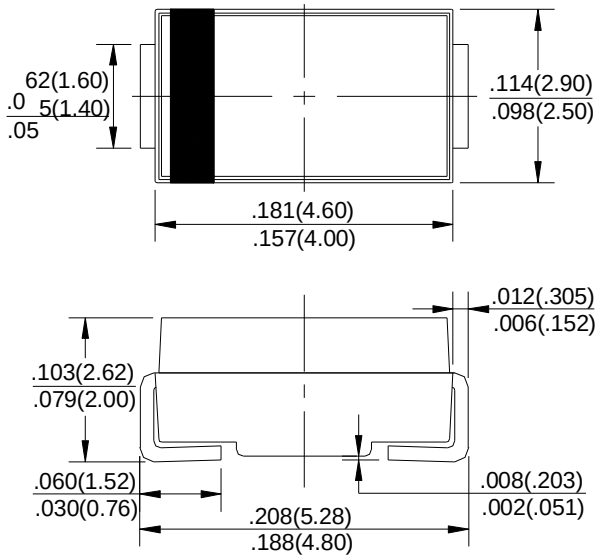
CURRENT 1.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

RS1A THRU RS1M

DO-214AC (SMA)



Dimensions in inches and (millimeters)

FEATURES

Plastic package has underwrites laboratory flammability Classification 94V-0
Low profile surface mount package
Built-in strain relief
Fast switching for high efficiency
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 & THERMAL CHARACTERISTICS

- Ratings at 25 ambient temperature unless otherwise specified

	SYMBOLS	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	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 T_L=90	$I_{F(AV)}$	1.0							Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method) T_L=90	I_{FSM}	30							Amps
Typical Thermal Resistance (Note 1)	R_{JA}	105							/W
	R_{JL}	32							
Operating junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150							

ELECTRICAL CHARACTERISTICS

		SYMBOLS	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	UNIT
Maximum Instantaneous Forward Voltage at 1.0A		V_F	1.30							Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	T_A = 25	I_R	5.0							μA
	T_A = 125		50							
Typical Reverse Recovery Time at I_F =0.5A, I_R =1.0A, I_{RR} =0.25A		t_{rr}	150				250	500		ns
Typical junction capacitance at 4.0V, 1MHz		C_J	30					7.0		pF

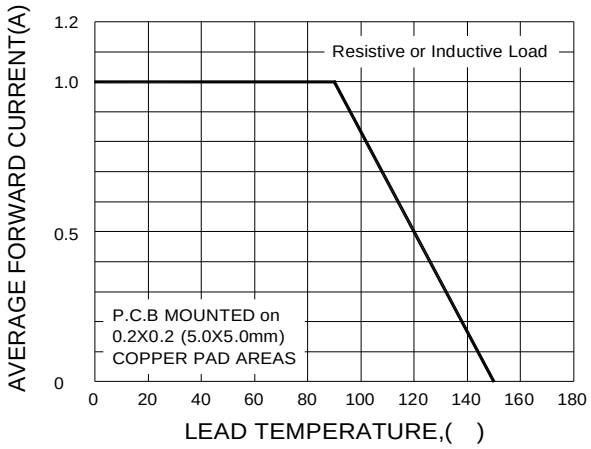
Notes:
1. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with 0.2×0.2″ (5.0 × 5.0mm) copper pad areas.

CURRENT 1.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

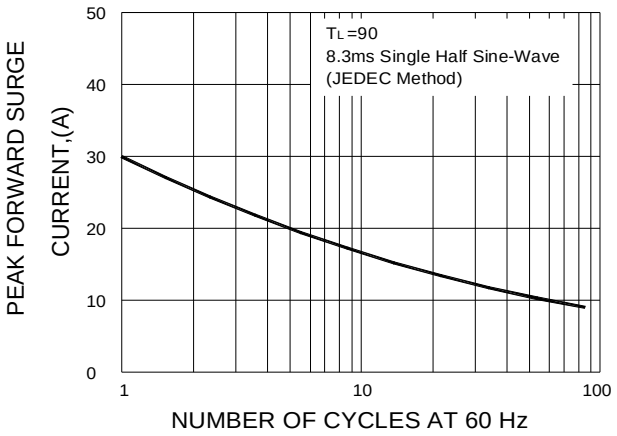
RS1A THRU RS1M

RATING AND CHRACTERISTIC CURVES RS1A Thru RS1M

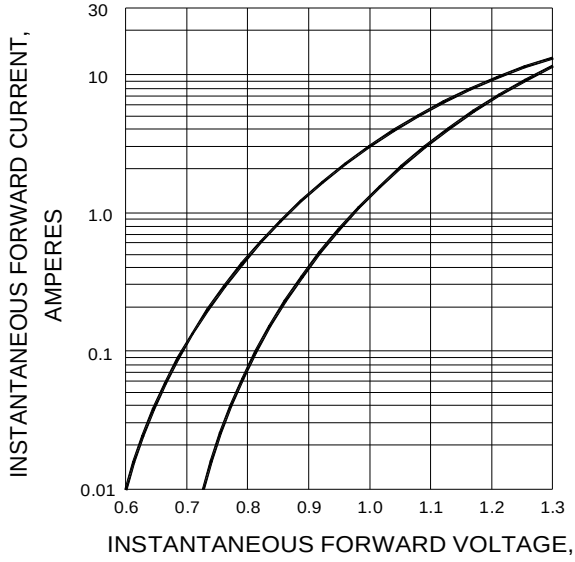
F1G.1-FORWARD CURRENT DERATING CURVE



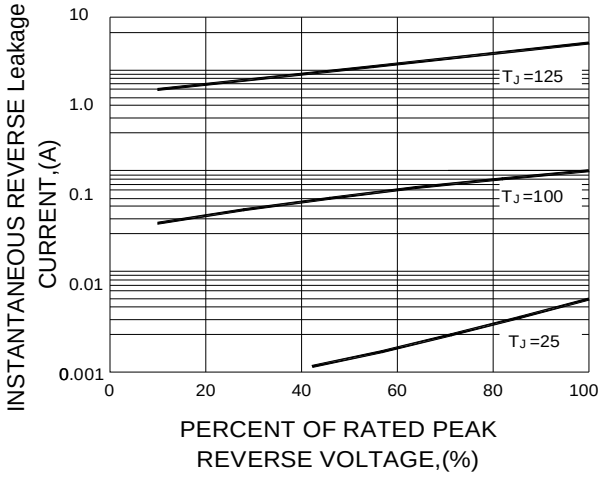
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



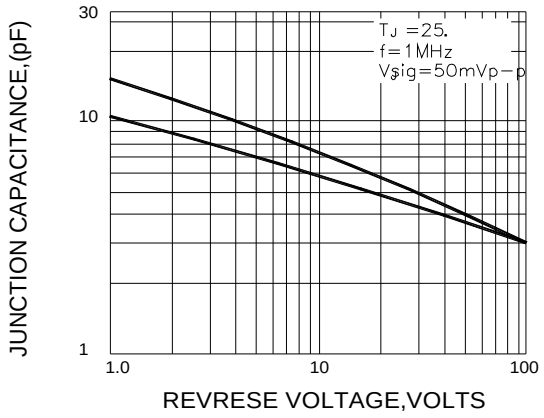
F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE



F1G.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

