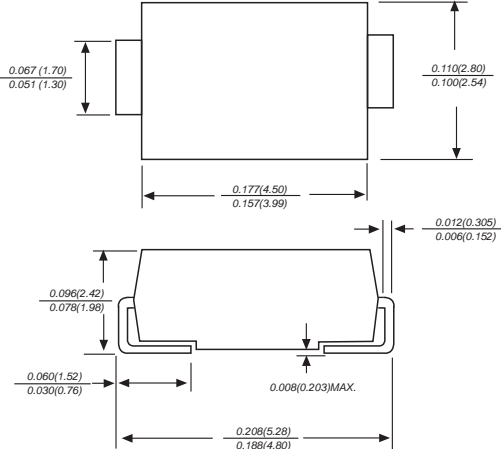


RS1A THRU RS1M

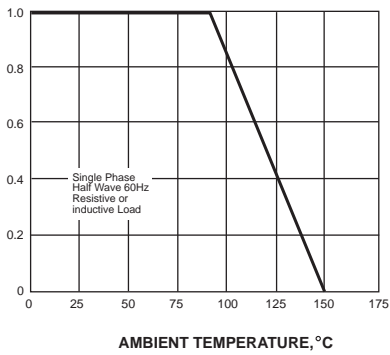
DO-214AC/SMA		FEATURES								
 <p style="text-align: center;"><i>Dimensions in inches and (millimeters)</i></p>		<ul style="list-style-type: none"> ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 ◆ For surface mounted applications ◆ Low reverse leakage ◆ Built-in strain relief, ideal for automated placement ◆ High forward surge current capability ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals ◆ Glass passivated chip junction 								
		MECHANICAL DATA								
		<p>Case : JEDEC DO-214AC molded plastic body over passivated chip Terminals : Solder plated, solderable per MIL-STD-750, Method 2026 Polarity : Color band denotes cathode end Mounting Position : Any Weight : 0.002 ounce, 0.07 grams</p>								
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS										
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.										
Catalog Number	SYMBOLS	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	UNITS	
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 $T_L=90^\circ\text{C}$	$I_{(AV)}$	1.0							Amp	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0							Amps	
Maximum instantaneous forward voltage at 1.0A	V_F	1.3							Volts	
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	5.0 50.0							μA	
Maximum reverse recovery time (NOTE 1)	t_{rr}	150				250	500		ns	
Typical junction capacitance (NOTE 2)	C_J	15.0							pF	
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	50.0							$^\circ\text{C/W}$	
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +150							$^\circ\text{C}$	
<p>Note: 1. Reverse recovery condition $I_F=0.5\text{A}, I_R=1.0\text{A}, t_{rr}=0.25\text{A}$ 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C. 3. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas</p>										

RS1A THRU RS1M

RATINGS AND CHARACTERISTIC CURVES RS1A THRU RS1M

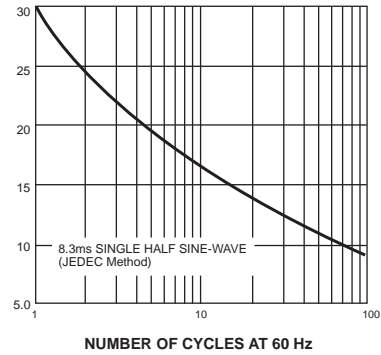
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



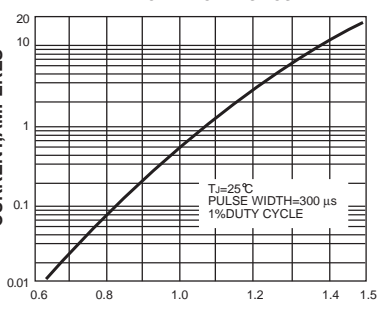
PEAK FORWARD SURGE CURRENT, AMPERES

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



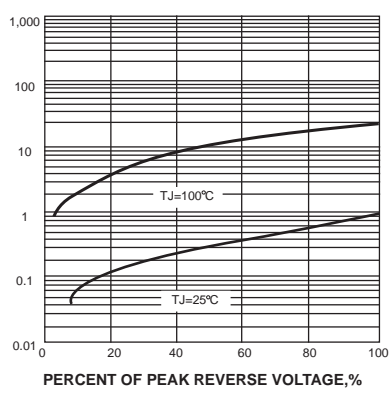
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



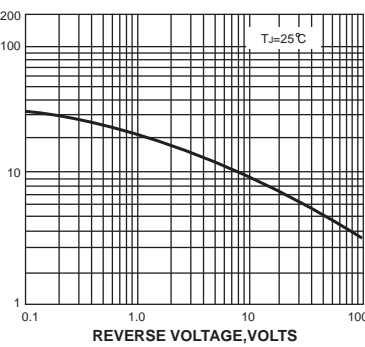
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

