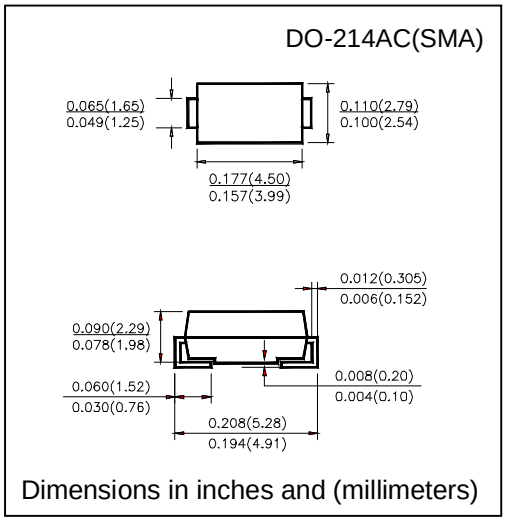
FEATURES

- 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 AND ELECTRICAL CHARACTERISTICS

- Ratings at 25℃ ambient temperature unless otherwise specified

MAXIMUM RATINGS & THERMAL CHARACTERISTICS

	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)	$R_{\theta JA}$	105							℃/W
	$R_{\theta JL}$	32							
Operating junction and Storage Temperature Range	T_J,T_{STG}	-55 to +150							℃

ELECTRICAL CHARACTERISTICS

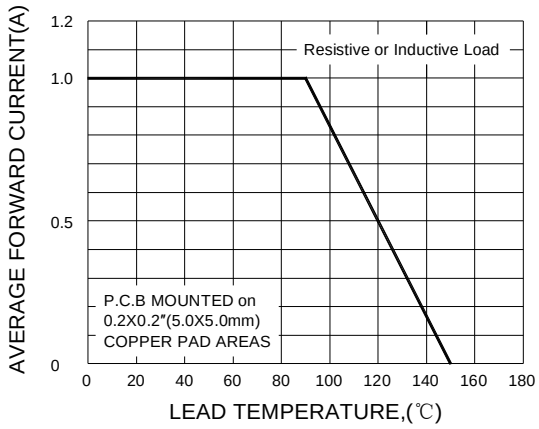
		SYMBOLS	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	UNIT
Maximum Instantaneous Forward Voltage at 1.0A		V_F	1.30							Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	T_A = 25℃	I_R	5.0							μA
	T_A = 125℃		50							
Typical Reverse Recovery Time at I_F=0.5A, I_R=1.0A, I_{RR}=0.25A		t_{rr}	150	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

Notes:

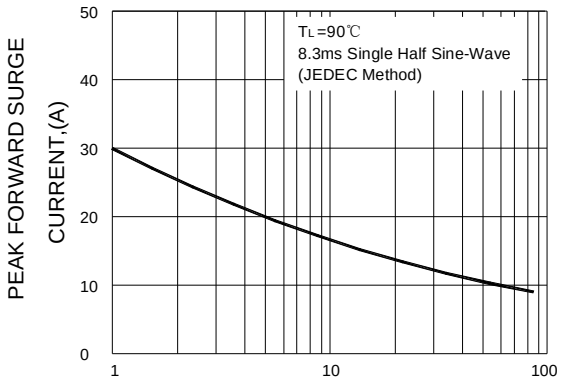
1. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with 0.2×0.2″ (5.0 × 5.0mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES RS1A THRU RS1M

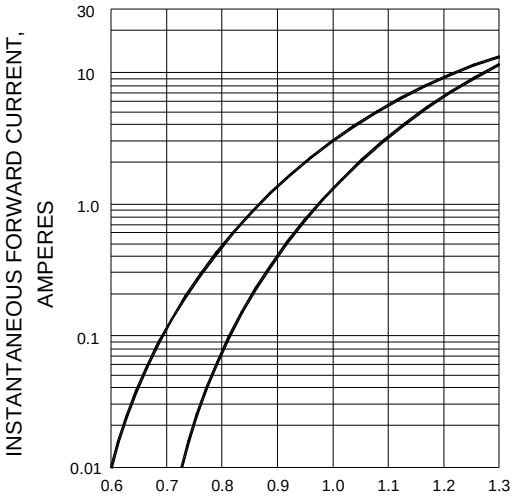
F1G.1-FORWARD CURRENT DERATING CURVE



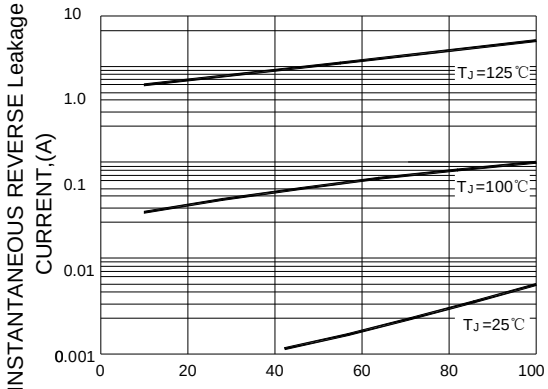
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



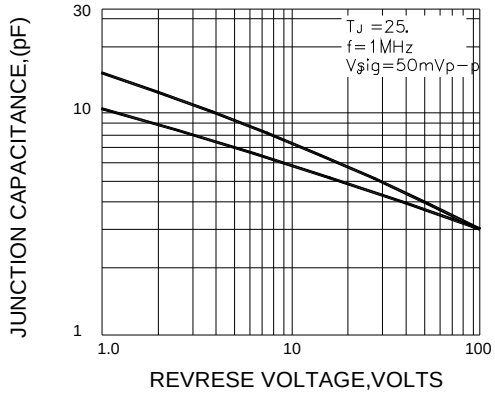
F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



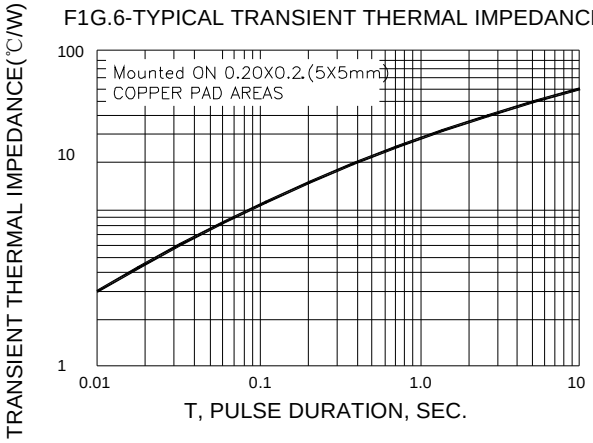
F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE



F1G.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



ORDERING INFORMATION

Order Code	Package	Baseqty	Deliverymode
UMW RS1A	SMA	2000	Tape and reel
UMW RS1B	SMA	2000	Tape and reel
UMW RS1D	SMA	2000	Tape and reel
UMW RS1G	SMA	2000	Tape and reel
UMW RS1J	SMA	2000	Tape and reel
UMW RS1K	SMA	2000	Tape and reel
UMW RS1M	SMA	2000	Tape and reel