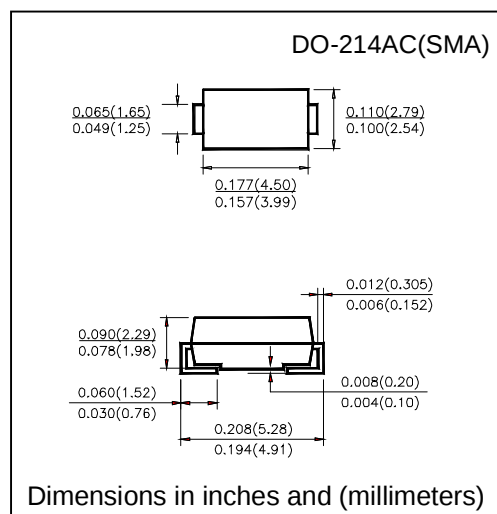


FEATURES

- 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°C/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°C 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 _{θJA}	105							℃/W
	R _{θJL}	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:

- 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

FIG.1-FORWARD CURRENT DERATING CURVE

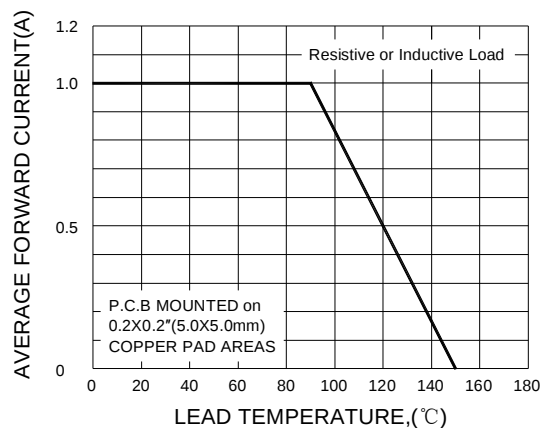


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

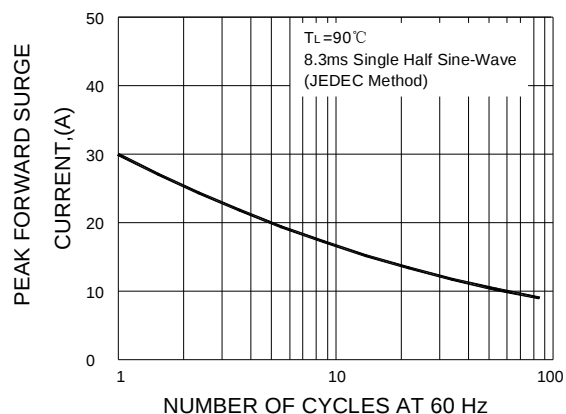


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

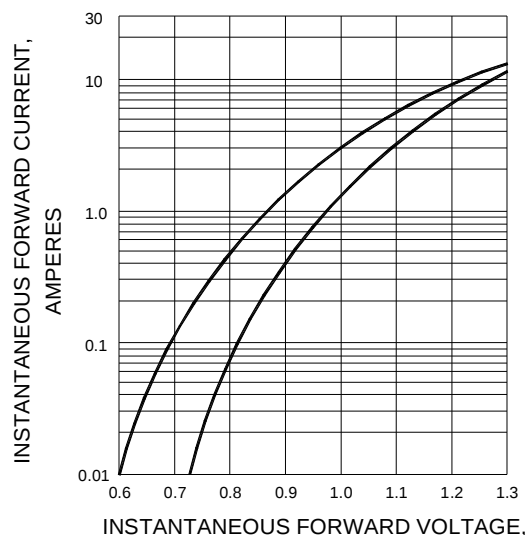


FIG.4-TYPICAL REVERSE CHARACTERISTICS

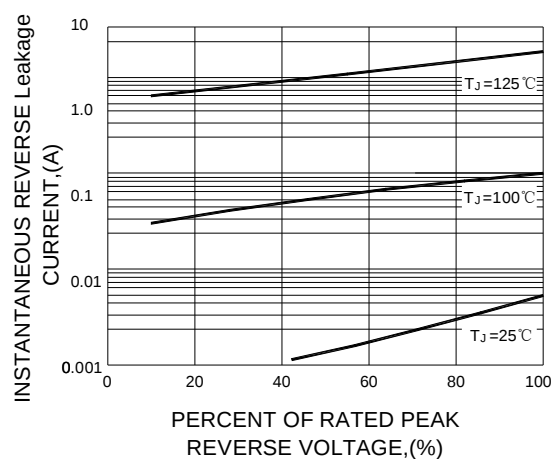


FIG.5-TYPICAL JUNCTION CAPACITANCE

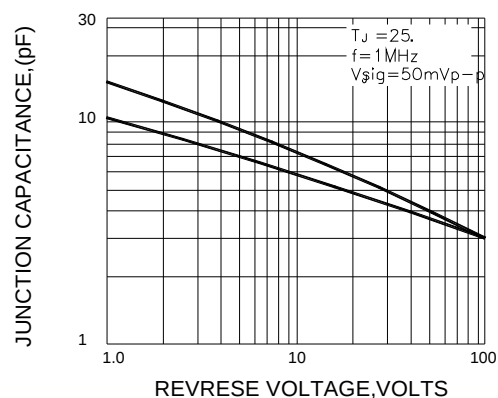
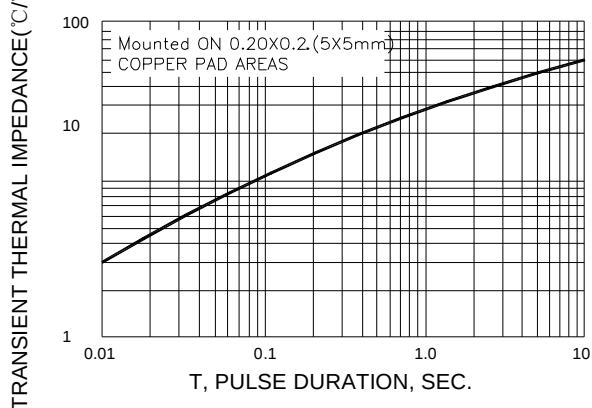


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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