Suntan

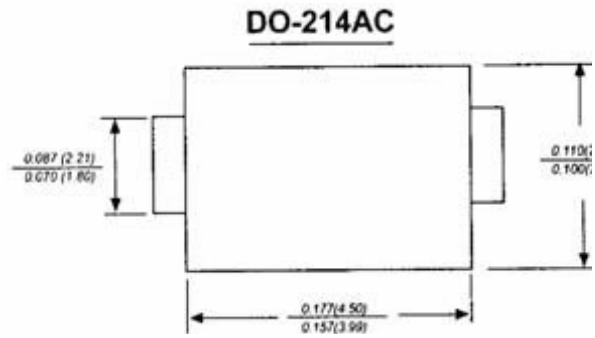
M1 THRU M7

SURFACE MOUNT GENERAL RECTIFIER

Reverse Voltage-50 to 1000 Volts Forward Current –1.0 Ampere

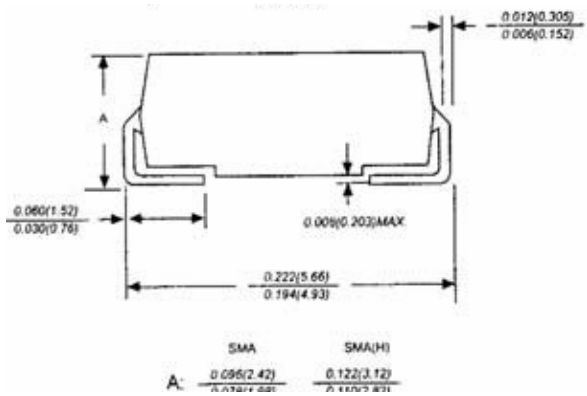
FEATURES:

- 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℃/10 seconds at terminals



MECHANICAL DATA:

Case: JEDEC DO-214AC molded plastic body
Terminals: Solder plated solderable per MIL-STD-750 Method 2026
Polarity: Color band denotes cathode end
Mounting Position: any
Weight: 0.003 ounce 0.093 grams
0.004 ounce 0.111 grams SMA(H)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Raings at 25℃ ambient temperature unless otherwise specified
Single phase half-wave 60HZ resistive or inductive load for capacitive load current derate by 20%

	SYMBOLS	M1	M2	M3	M4	M5	M6	M7	UNITS
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	Voc	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at TL=110℃	I(AV)	1.0							AMP
Peak forward surge current 8.3ms single Half sine-wave superimposed on rated toad (JEDEC Method)	IFSM	30.0							AMPS
Maximum instantaneous forward voltage at 1.0A	VF	1.0							VOLTS
Maximum DC reverse current TA=25℃ at rated DC blocking voltage TA=100℃	IR	5.0 50.0							μA
Typical junction capacitance (NOTE 1)	CJ	15							PF
Typical thermal resistance(NOTE 2)	ROJA	75							℃/W
Operating junction and storage temperature range	TJ TSTC	-65 to+175							℃

Note:1. Measured at 1 MHZ and applied reverse voltage of 4.0V D.C
2. P.C.B mounted with 0.2×0.2(5.0×5.0mm) copper pad areas

PATINGS AND CHARACTERISTIC CURVES M1 THRU M7

FIG. 1- FORWARD CURRENT DERATING CURVE

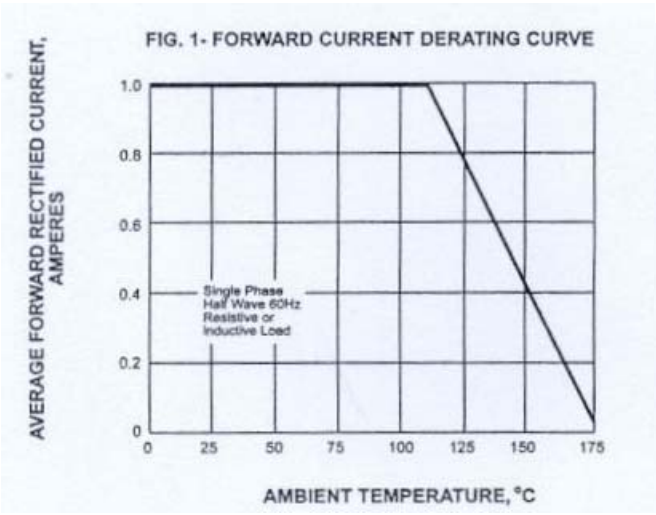


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

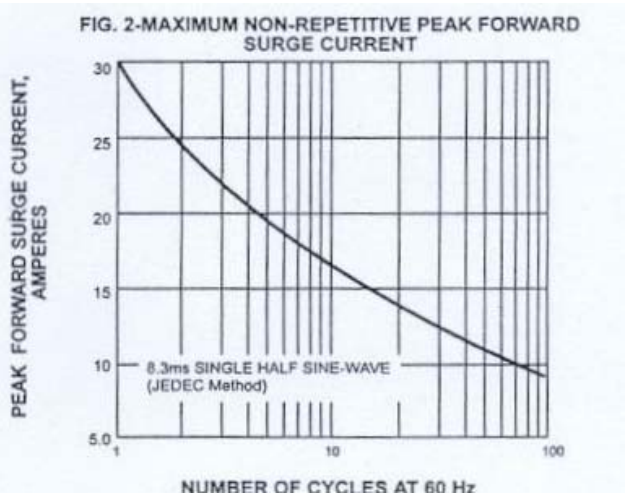


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

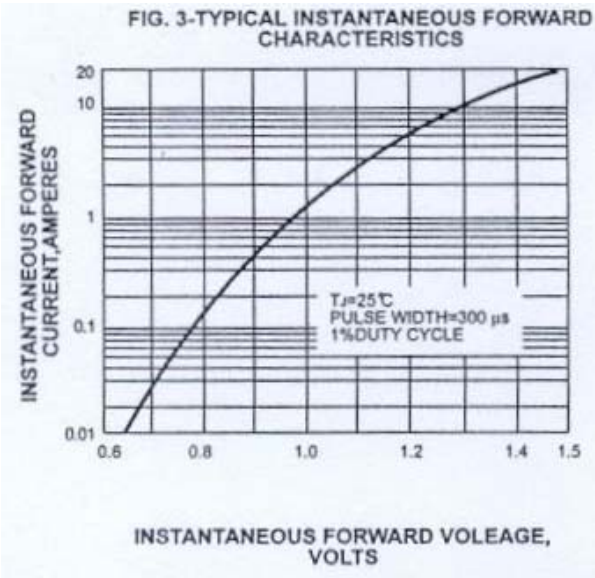


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

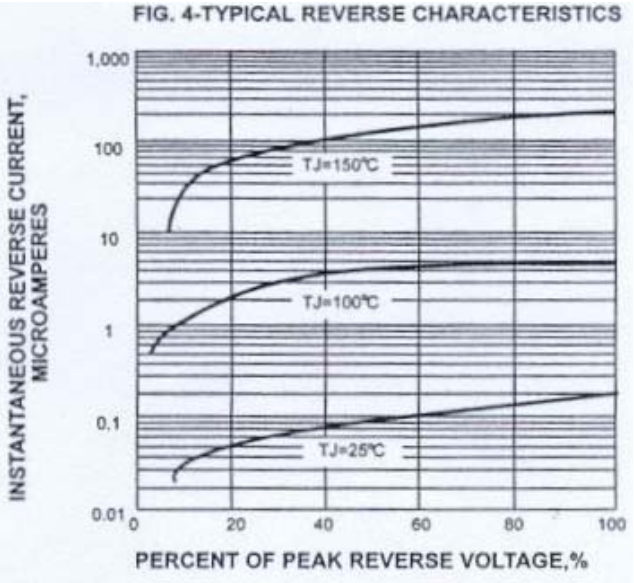


FIG. 5-TYPICAL JUNCTION CAPACITANCE

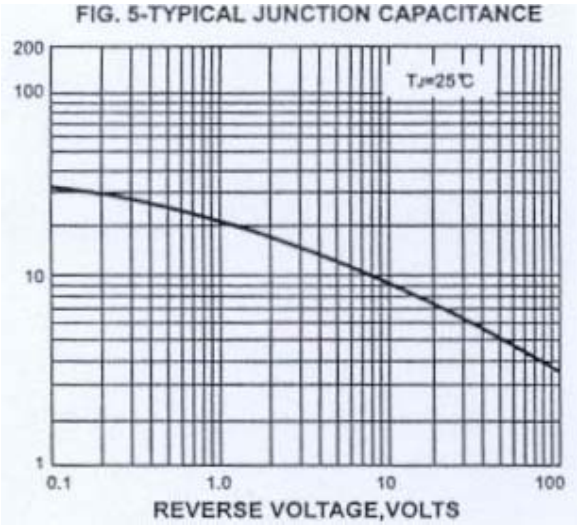


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE