



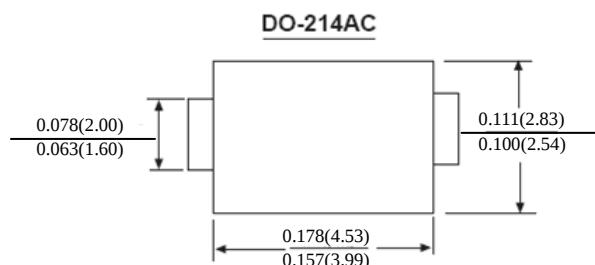
M1 THRU M7

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°C/10 seconds at terminals



MECHANICAL DATA

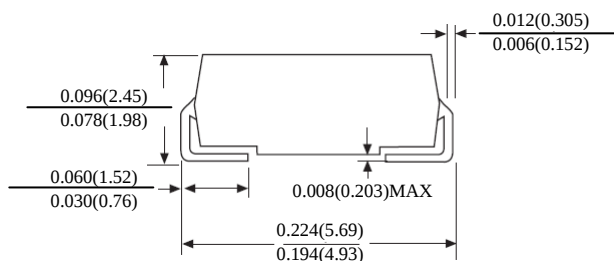
Case : JEDEC DO-214AC molded plastic body

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



Dimensions in inches and (millimeters)

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%

	SYMBOLS	M1	M2	M3	M4	M5	M6	M7	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1200	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	1200	VOLTS
Maximum average forward rectified current at $T_L=110^\circ\text{C}$	$I_{(AV)}$	1.0							AMP
Peak forward surge current 8.3ms single Half sine-wave superimposed on rated toad (JEDEC Method)	I_{FSM}	30.0							AMPS
Maximum instantaneous forward voltage at 1.0A	V_F	1.0							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
Typical junction capacitance (NOTE 1)	C_J	15.0							pF
Typical thermal resistance (NOTE 2)	R_{qJA}	75.0							$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175							$^\circ\text{C}$

Note :1. Measured at 1 MHZ and applied reverse voltage of 4.0V D.C

2. P.C.B mounted with 0.2x0.2 " (5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES M1 THRU M7

FIG. 1- FORWARD CURRENT DERATING CURVE

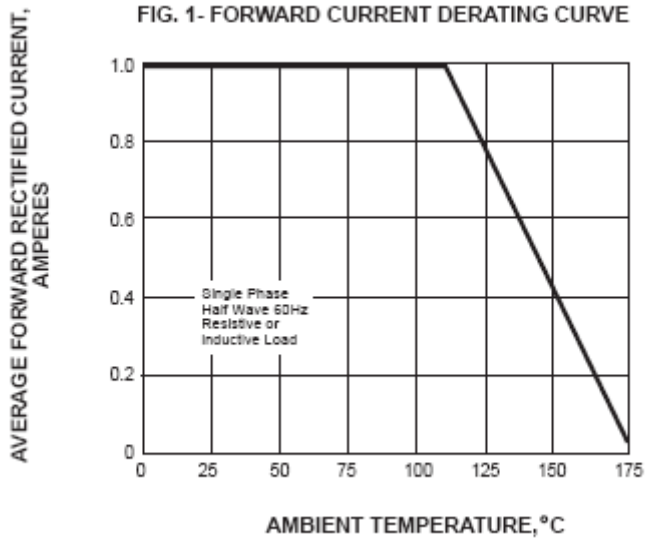


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

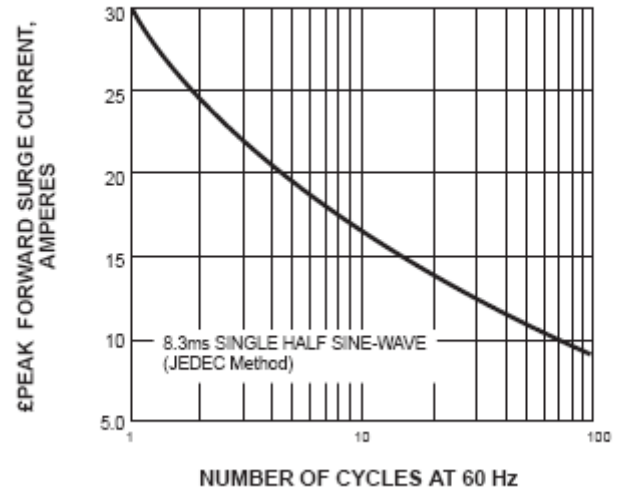


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

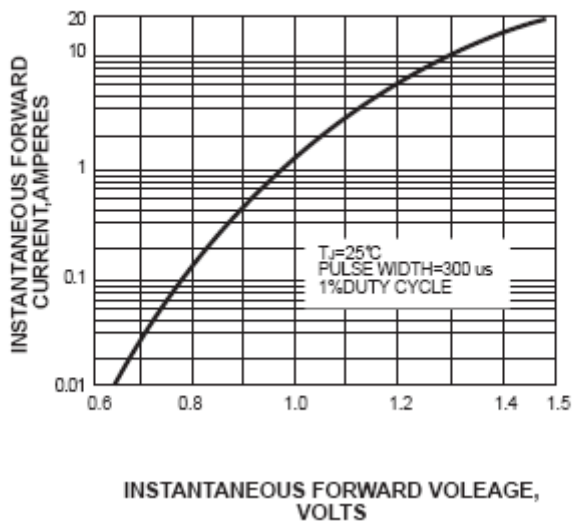


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

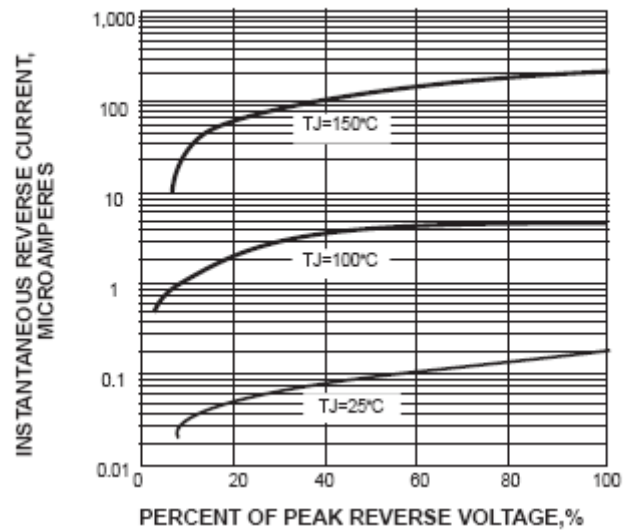


FIG. 5-TYPICAL JUNCTION CAPACITANCE

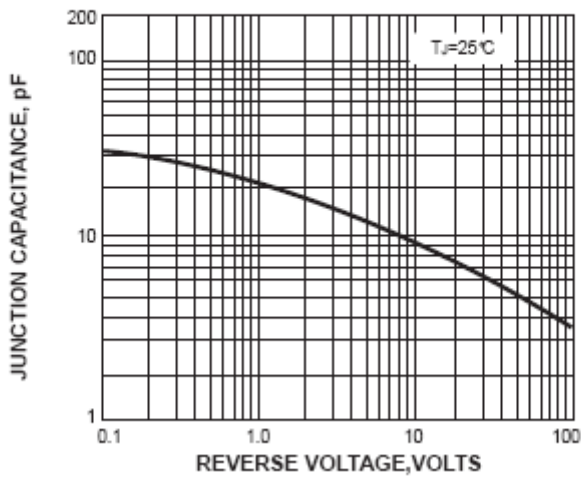


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

