### M1 THRU M7

#### SURFACE MOUNT GENERAL RECTIFIER FORWARD CURRENT 1.0 Ampere REVERSE VOLTAGE 50 to 1000 Volts

#### 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:

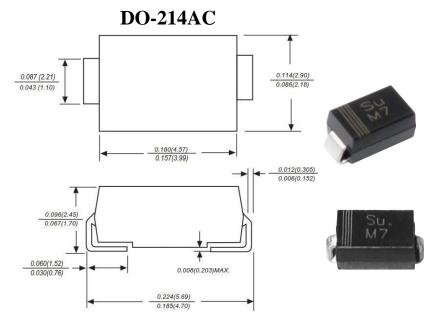
250°C/10 seconds at terminals.

#### 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.



**Dimensions in inches and (millimeters)** 

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

	SYMBOL	M1	M2	М3	M4	M5	M6	M7	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{\text{RRM}}$	50	100	200	400	600	800	1000	VOLTS
Maximum RMS Voltage	$V_{\text{RMS}}$	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 $T_L$ =55°C	I(AV)	1.0							Amp
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30.0							Amps
Maximum Instantaneous Forward Voltage at 1.0A	$V_{\rm F}$	1.1							Volts
Maximum DC Reverse Current $T_A=25^{\circ}C$ at Rated DC Blocking voltage $T_A=100^{\circ}C$	Ir	5.0 50.0							uA
Typical junction capacitance (NOTE 1)	$C_{J}$	15.0							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	75.0							°C/W
Operating junction and storage temperature range	T <sub>J</sub> ,Tstg	-55 to +150							$^{\circ}\!\mathbb{C}$

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

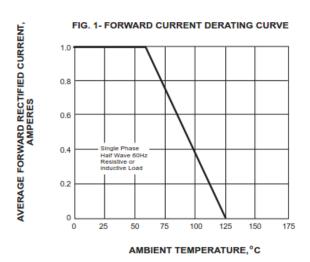
2. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

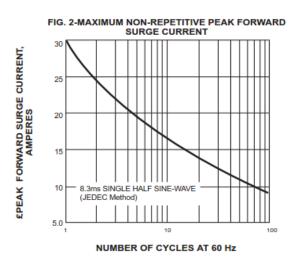


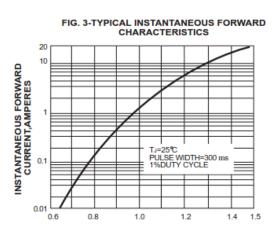
## M1 THRU M7

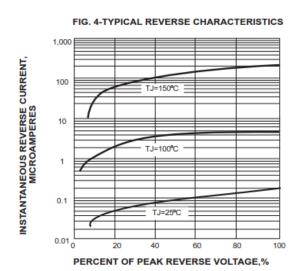
# SURFACE MOUNT GENERAL RECTIFIER REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.0 Ampere

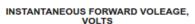
#### RATING AND CHARACTERISTIC CURVES M1 THRU M7

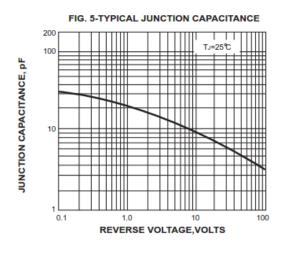


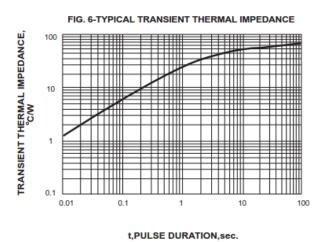












Note: Specifications are subject to change without notice. For more detail and update, please visit our website.