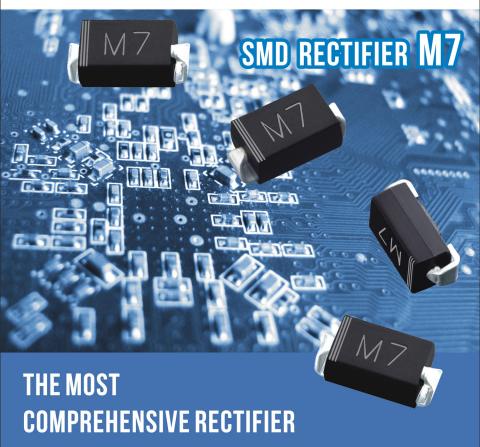


# **Suntan**® Technology Company Limited



Suntan offers the broadest line of innovative surface mount general rectifier -- M7.

M1 thru M7 reverse voltage ranges from 50 to 1000 Volts with low reverse leakage.

The M7 provides outstanding quality at a competitive price in the market.

We are making it our best-selling rectifier.

Our M7 will satisfy all of your most demanding applications.

## 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:

# MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic body

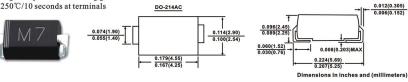
Terminals: Solder plated solderable per MIL-STD-750,

Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.003 ounce 0.093 grams



#### 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	М3	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	VDC	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 load (JEDEC Method)	IFSM	30.0							AMPS
Maximum instantaneous forward voltage at 1.0A	VF	1.1							VOLTS
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=100°C	Ir	5.0 50.0							μА
Typical junction capacitance (NOTE 1)	Cı	15.0							pF
Typical thermal resistance (NOTE 2)	RqJA	75.0							°C/W
Operating junction and storage temperature range	TJ, TSTG	-55 to +150							°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

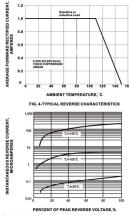
FIG. 1- FORWARD CURRENT DERATING CURVE

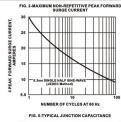
Resistive or Inductive Load

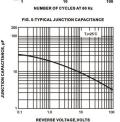
1.2

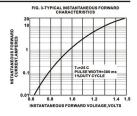
1.0

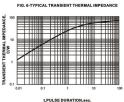
#### RATINGS AND CHARACTERISTIC CURVES M1 THRU M7











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