

Suntan® Technology Company Limited



SMD RECTIFIER M7



THE MOST COMPREHENSIVE RECTIFIER

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

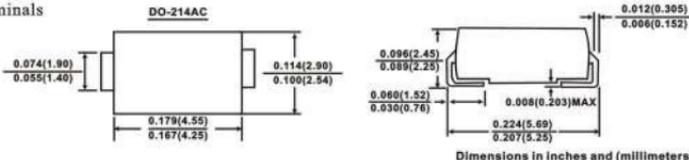
Reverse Voltage -50 to 1000 Volts Forward Current -1.0 Ampere

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: 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



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}	400	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 at T _J =110°C	I _A (AV)								1.0	AMP
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}								30.0	AMPS
Maximum instantaneous forward voltage at 1.0A	V _F								1.1	VOLTS
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R								5.0 50.0	μA
Typical junction capacitance (NOTE 1)	C _J								15.0	pF
Typical thermal resistance (NOTE 2)	R _{θJA}								75.0	°C/W
Operating junction and storage temperature range	T _J , T _{STG}								-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

RATINGS AND CHARACTERISTIC CURVES M1 THRU M7

