



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.

TEL: 852-2790 0314 FAX: 852-2790 0206

	<p>RECTIFIER SPECIALISTS</p>	<p>M13 THRU M20</p>
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TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SILICON RECTIFIER

VOLTAGE RANGE 1300 to 2000 Volts


CURRENT 1.0 Ampere

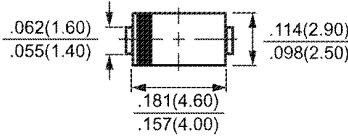
FEATURES

- * Ideal for surface mounted applications
- * Low leakage current

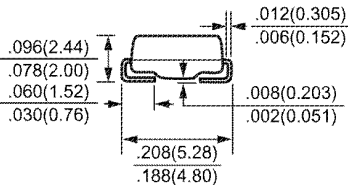
MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 0.064 gram


 SMA(DO-214AC)



.062(1.60) .114(2.90)
 .055(1.40) .098(2.50)
 .181(4.60)
 .157(4.00)



.096(2.44) .012(0.305)
 .078(2.00) .006(0.152)
 .060(1.52) .008(0.203)
 .030(0.76) .002(0.051)
 .208(5.28)
 .188(4.80)

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

	SYMBOL	M13	M16	M20	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	1300	1600	2000	Volts
Maximum RMS Voltage	V _{RMS}	910	1120	1400	Volts
Maximum DC Blocking Voltage	V _{DC}	1300	1600	2000	Volts
Maximum Average Forward Rectified Current at TA = 75°C	I _O	1.0			Amps
Peak Forward Surge Current I _{FM} (surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30			Amps
Maximum Forward Voltage at 1.0A DC	V _F	1.1			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	@TA = 25°C			uAmps
		@TA = 125°C			
Maximum Reverse Recovery Time (Note 3)	t _{rr}	2.5			uSec
Typical Thermal Resistance (Note 2)	R _{θJL}	30			°C/W
Typical Junction Capacitance (Note 1)	C _j	15			pF
Operating and Storage Temperature Range	T _J , T _{stg}	-65 to + 175			°C

NOTES : 1. Measured at 1.0 MHz and applied reverse voltage of 4.0VDC
 2. Thermal Resistance (Junction to Ambient), .24in² (6.0mm²) copper pads to each terminal.
 3. Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.



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RATING AND CHARACTERISTIC CURVES (M13 thru M20)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

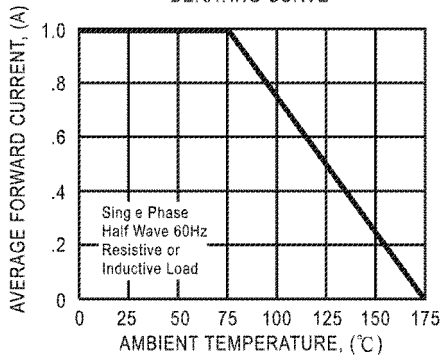


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

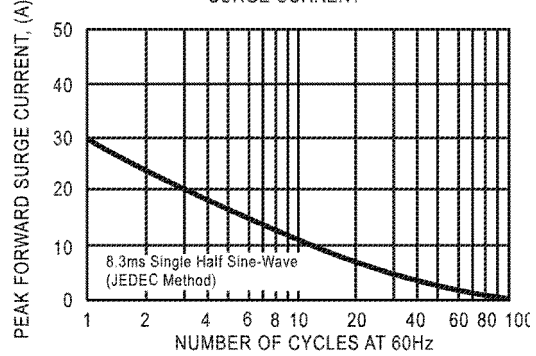


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

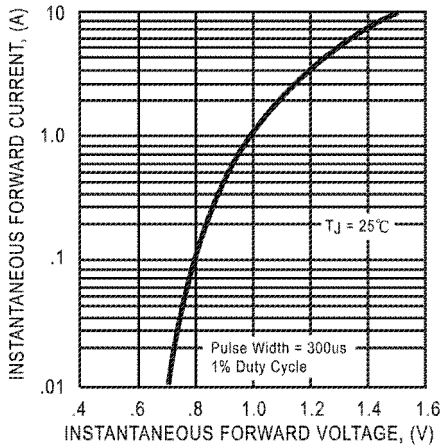


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

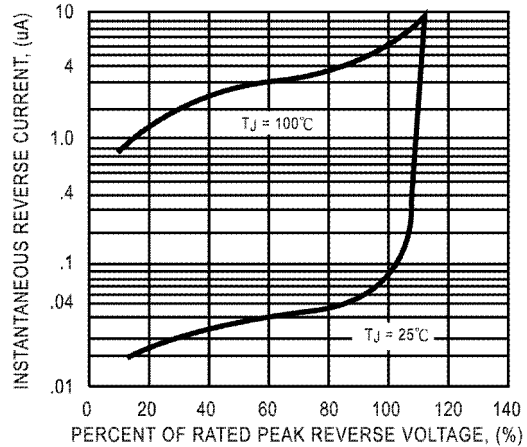


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

