

UF1AF~UF1MF

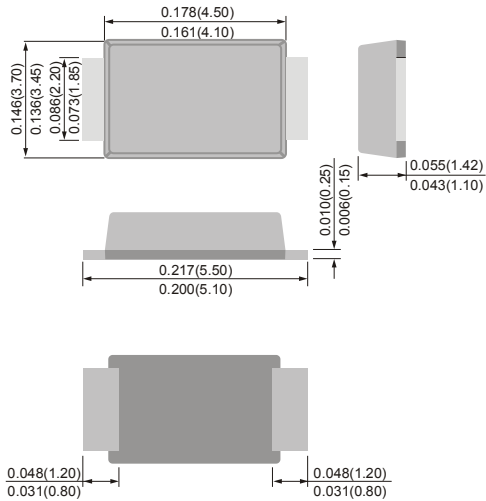
SURFACE MOUNT ULTRAFAST RECTIFIER

VOLTAGE 50 to 1000 Volts CURRENT 1.0 Amperes



SMBF

Unit : inch(mm)



FEATURES

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Ultrafast recovery times for high efficiency
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated junction
- Pb free product are available : 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

Case: JEDEC SMBF molded plastic

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Indicated by cathode band

Standard packaging: 12mm tape (EIA-481)

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%.

PARAMETER	SYMBOL	UF1AF	UF1BF	UF1DF	UF1GF	UF1JF	UF1KF	UF1MF	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Reverse Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current .375" (9.5mm) Lead length at $T_L=100$	I_{AV}	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							A
Maximum Forward Voltage at 1.0A	V_F	1.0		1.3		1.70		V	
Maximum DC Reverse Current $T_J=25$ at Rated DC Blocking Voltage $T_J=100$	I_R	5 100							uA
Maximum Reverse Recovery Time (Note 1)	T_{RR}	50			75			ns	
Typical Junction capacitance (Note 2)	C_J	17							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	30							/W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	- 55 to + 150							

NOTES: 1. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{rr}=0.25A$
 2. Measured at 1 MHz and applied $V_r = 4.0$ volts.
 3. 8.0 mm² (.013mm thick) land areas.

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RATING AND CHARACTERISTIC CURVES

