



TECHNICAL SPECIFICATION

**FM4001F
THRU
FM4007F**

SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIER VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

FEATURES

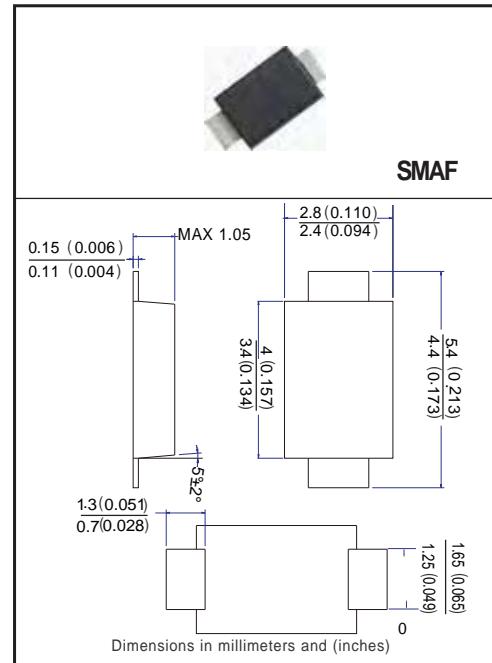
- * Glass passivated device
- * Ideal for surface mounted applications
- * Low leakage current
- * Metallurgically bonded construction
- * Mounting position: Any

MECHANICAL DATA

- * Epoxy : Device has UL flammability classification 94V-0

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.



MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	FM4001F	FM4002F	FM4003F	FM4004F	FM4005F	FM4006F	FM4007F	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	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 Ambient Temperature	I ₀					1.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}				30				Amps
Current Squared Time	I ² t				3.7				A ² S
Typical Thermal Resistance (Note 1)	R _{θJA}			80					°C/W
Typical Thermal Resistance (Note 1)	R _{θJL}		27			30			°C/W
Typical Junction Capacitance (Note 2)	C _J			15					pF
Operating Temperature Range	T _J			150					°C
Storage Temperature Range	T _{STG}			-55 to +150					°C

ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	FM4001F	FM4002F	FM4003F	FM4004F	FM4005F	FM4006F	FM4007F	UNITS
Maximum Instantaneous Forward Voltage at 1.0A DC	V _F				1.0				Volts
Maximum Average Reverse Current @ T _A = 25°C	I _R				1.0				uA
at Rated DC Blocking Voltage @ T _A = 100°C					50				uA

NOTES : 1. Thermal Resistance : Mounted on PCB.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2017-04
REV:A

RATING AND CHARACTERISTICS CURVES (FM4001F THRU FM4007F)

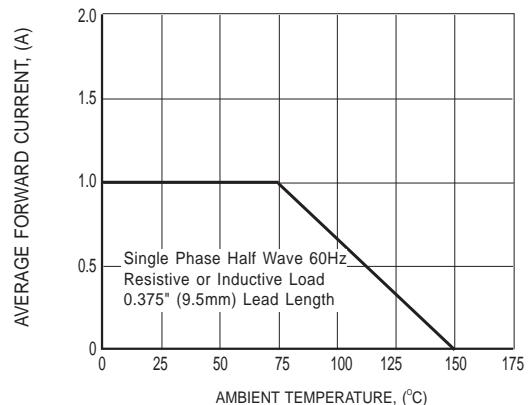


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

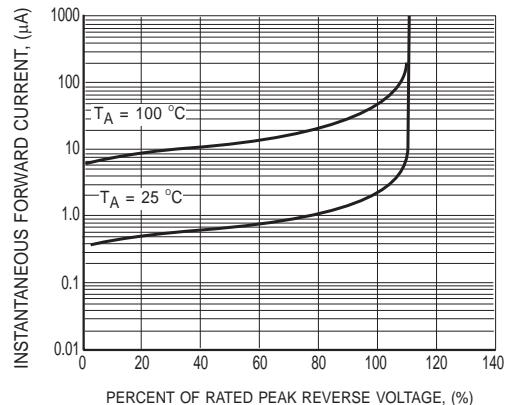


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

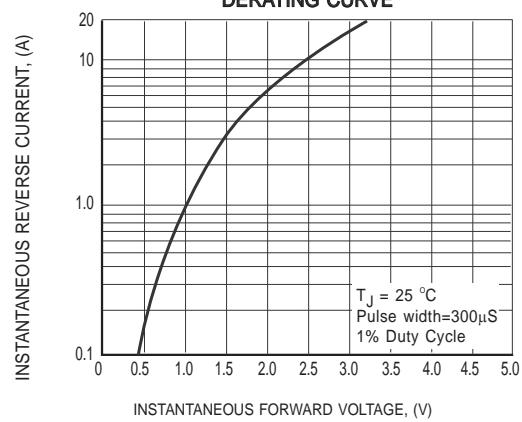


FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

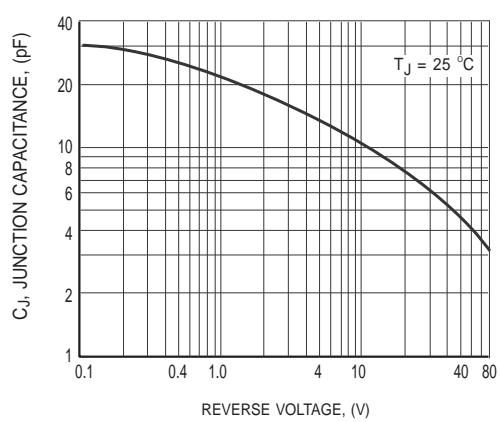


FIG.4 TYPICAL JUNCTION CAPACITANCE

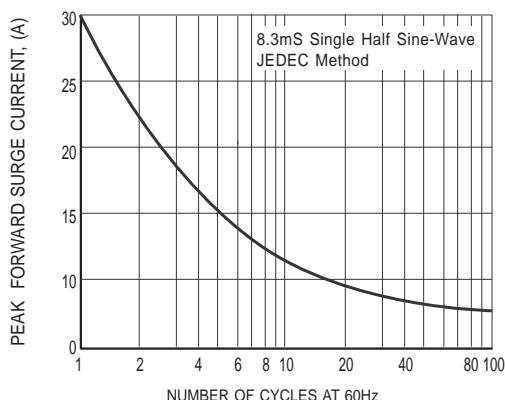
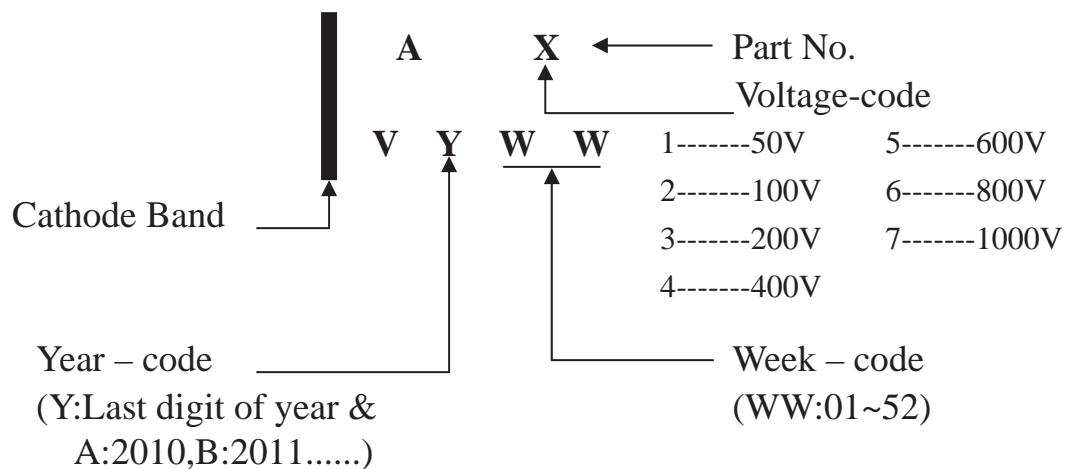


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

RECTRON

Marking Description



REEL TAPING SPECIFICATIONS FOR SURFACE MOUNT DEVICES-FLAT MELF (SMAF)

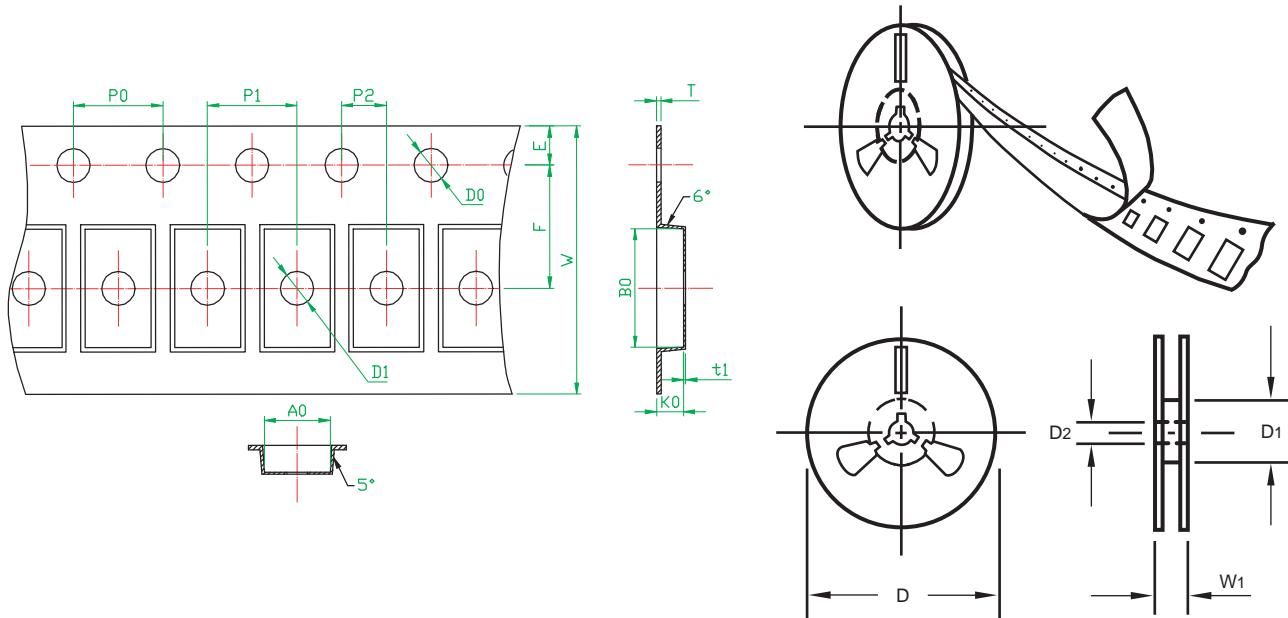


Fig.: Configuration of FLAT MELF TAPING
(SMAF)

ITEM	SYMBOL	SMAF mm(inch)
Carrier width	A	2.9 ± 0.10 (0.114 \pm 0.004)
Carrier length	B	5.35 ± 0.10 (0.211 \pm 0.004)
Carrier depth	C	1.15 ± 0.10 (0.045 \pm 0.004)
Sprocket hole	D0	1.55 ± 0.05 (0.061 \pm 0.002)
Reel outside diameter	D	178 ± 2.0 (7.0 \pm 0.079)
Reel inner diameter	D1	50 Min.
Feed hole diameter	D2	13 ± 0.5 (0.512 \pm 0.020)
Strocket hole position	E	1.75 ± 0.1 (0.069 \pm 0.004)
Punch hole position	F	5.50 ± 0.05 (0.217 \pm 0.002)
Punch hole pitch	P	4.0 ± 0.1 (0.157 \pm 0.004)
Sprocket hole pitch	P0	4.0 ± 0.1 (0.157 \pm 0.004)
Embossment center	P1	2.0 ± 0.05 (0.079 \pm 0.002)
Total tape thickness	T	0.23 ± 0.02 (0.009 \pm 0.001)
Tape width	W	12.0 ± 0.3 (0.472 \pm 0.012)
Reel width	W1	16.8 ± 2.0 (0.661 \pm 0.079)

Note: 1.Devices are packed in accordance with EIA standard RS-481-D and specification given above.

2.Available on 7 inch (1500 ct.) or 13 inch (5000 ct.) diameter reels.

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SMAF	-T	3,000	12,000	---	---	178	390*205*310	96,000	---
SMAF	-W	10,000	20,000	---	---	330	360*355*360	160,000	---

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