沛倫股份有限公司
Compact Technology Corp.

FM4001FL thru FM4007FL

SURFACE MOUNT
GENERAL PURPOSE RECTIFIERS

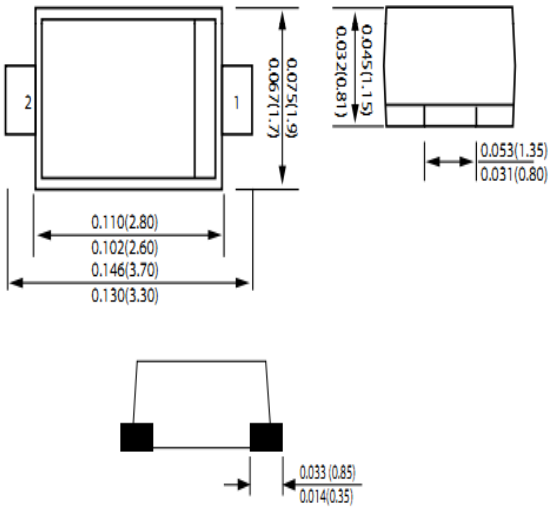
REVERSE VOLTAGE **- 50** to **1000** Volts
FORWARD CURRENT **- 1.0** Ampere

FEATURES

- Plastic passivated Junction
- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0

MECHANICAL DATA

- Case : Molded plastic
- Polarity : Indicated by cathode band
- Weight : 0.002 ounces, 0.064 grams



SOD-123FL

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

CHARACTERISTICS	SYMBOL	FM4001FL	FM4002FL	FM4003FL	FM4004FL	FM4005FL	FM4006FL	FM4007FL	UNIT
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 Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T_L =100˚C	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I_{FSM}	20							A
Maximum forward Voltage at 1.0A DC	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T_J =25˚C @T_J =125˚C	I_R	10 100							uA
Typical Junction Capacitance (Note1)	C_J	30							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	100							˚C/W
Maximum Reverse Recovery Time (Note 3)	T_{RR}	2.0							us
Operating Temperature Range	T_J	-55 to +150							˚C
Storage Temperature Range	T_{STG}	-55 to +150							˚C

NOTES : 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance Junction to Lead.
3. Measured with :IF=0.5A, IR=1.0A, IRR=0.25A

RATINGS AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

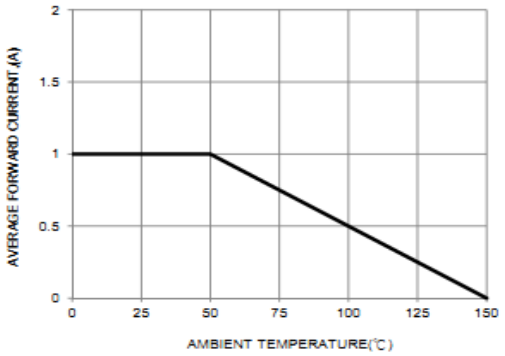


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

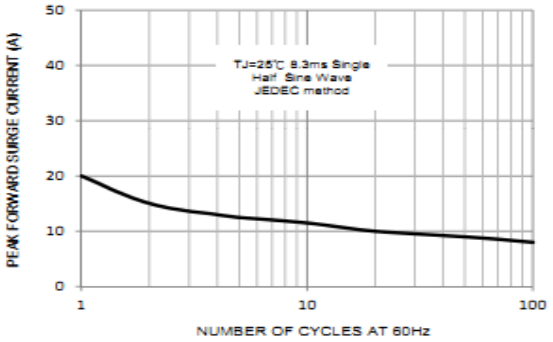


FIG.3- TYPICAL FORWARD CHARACTERISTICS

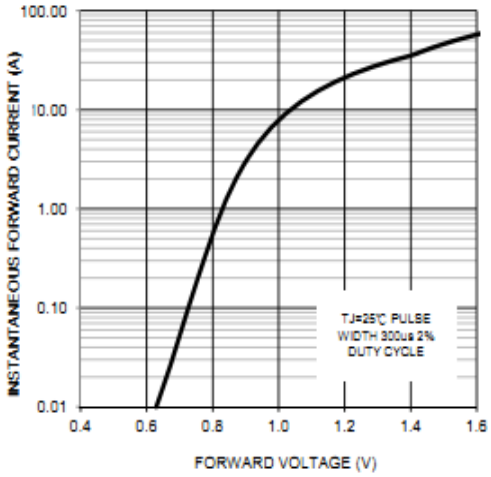


FIG.4- TYPICAL REVERSE CHARACTERISTICS

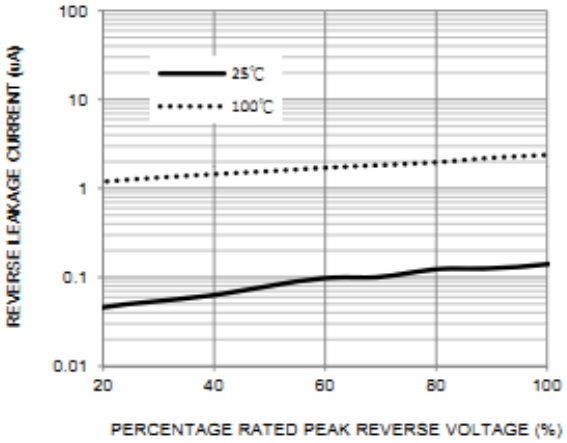


FIG.5- TYPICAL JUNCTION CAPACITANCE