沛倫股份有限公司
Compact Technology Corp.

PS1000FL thru PS1010FL

SURFACE MOUNT
FAST RECOVERY RECTIFIERS

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

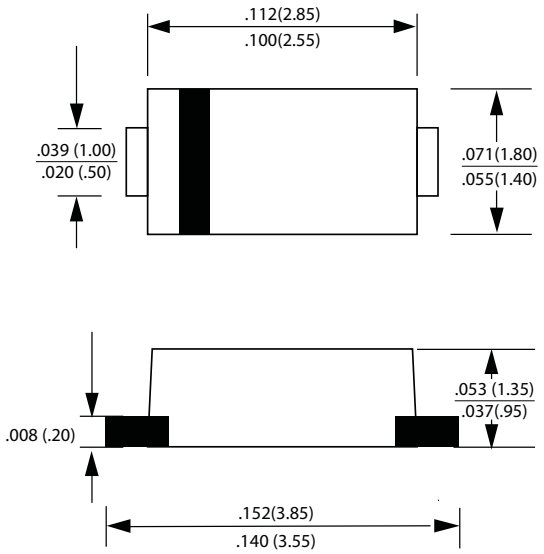
FEATURES

- Glass 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 : 0.018 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	PS1000FL	PS1001FL	PS1002FL	PS1004FL	PS1006FL	PS1008FL	PS1010FL	UNIT
Maximum Repetitive 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 =90℃	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I_{FSM}	30							A
Maximum forward Voltage at 1.0A DC	V_F	1.3							V
Maximum DC Reverse Current @T_J =25℃ at Rated DC Blocking Voltage @T_J =125℃	I_R	5.0 100							uA
Typical Junction Capacitance (Note1)	C_J	10							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	30							℃/W
Maximum Reverse Recovery Time (Note 3)	T_{RR}	150				250	500		ns
Operating & Storage Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

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

RATNG AND CHARACTERISTIC CURVES

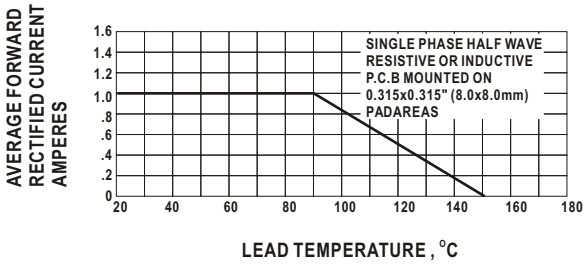


FIG . 1- FORWARD CURRENT DERATING CURVE

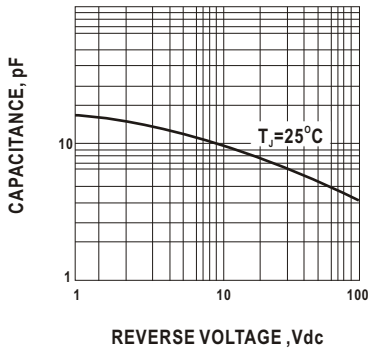


FIG. 2- TYPICAL JUNCTION CAPACITANCE

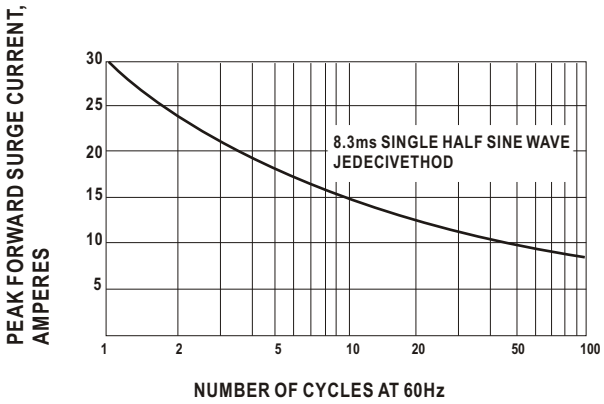


FIG . 3- PEAK FORWARD SURGE CURRENT

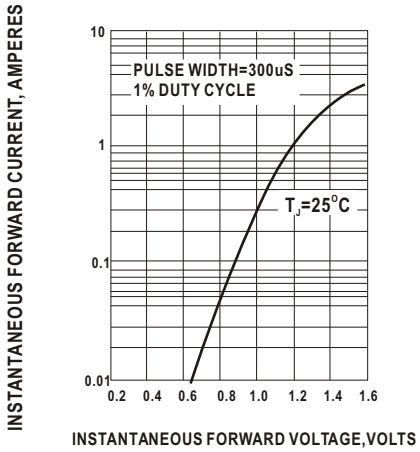
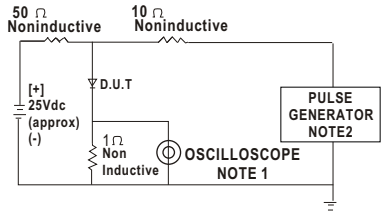


FIG.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



NOTE:1.Rise TIME=7ns max
Input Impedance = 1 megohm 22 pF
2.Rise Time = 10ns max
Source Impedance = 50Ohms

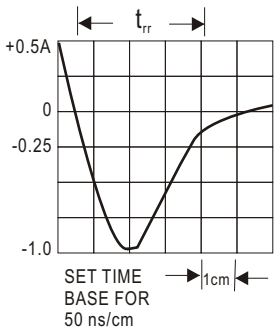


Fig. 5 - REVERSE FRCOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM