Silion Rectifier

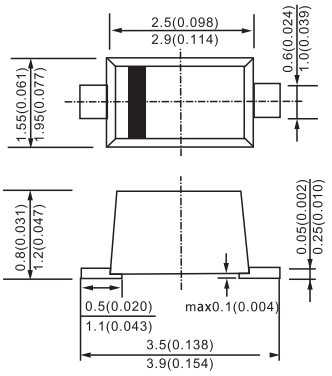
SM4001PL THRU SM4007PL

50V-1000V 1.0A

FEATURES

- Glass passivated device
- Ideal for surface mouted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed: 250℃/10 seconds,0.375”(9.5mm) lead length, 5 lbs. (2.3kg) tension

SOD-123FL



Dimensions in millimeters

MECHANICAL DATA

Case: JEDEC SOD-123FL molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.012 ounce, 0.3 gram

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 current derate by 20%.

Catalog Number	SYMBOLS	SM4001PL A1	SM4002PL A2	SM4003PL A3	SM4004PL A4	SM4005PL A5	SM4006PL A6	SM4007PL A7	UNITS
Maximum repetitive 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 T_A=65℃ (NOTE 1)	$I_{(AV)}$	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) T_L=25℃	I_{FSM}	25.0							Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.1							Volts
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=125℃	I_R	10.0 50.0							μA
Typical junction capacitance (NOTE 2)	C_J	4							pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	180							K/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150							℃

Note: 1.Averaged over any 20ms period.
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3.Thermal resistance from junction to ambient at 0.375” (9.5mm)lead length,P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES SM4001PL THRU SM4007PL

FIG.1 –TYPICAL FORWARD CHARACTERISTIC

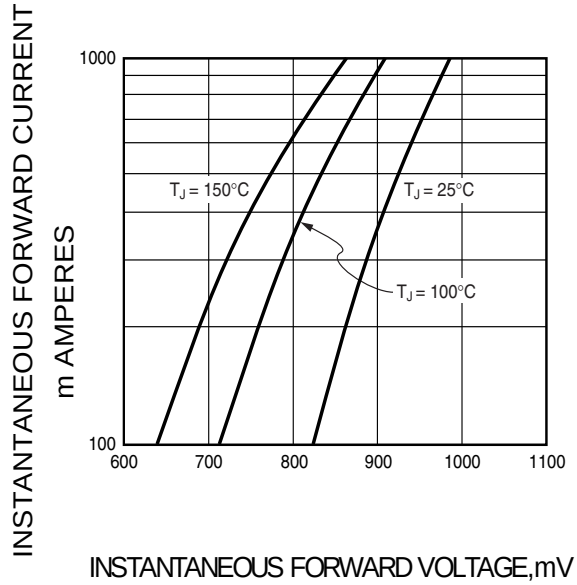


FIG.2 – TYPICAL JUNCTION CAPACITANCE

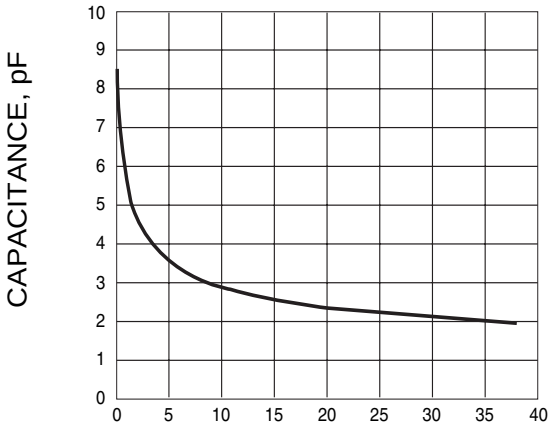


FIG.3 – TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

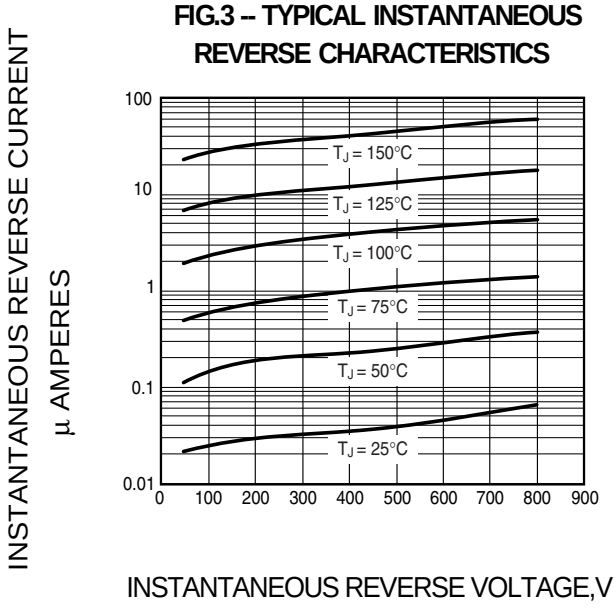


FIG.4 – FORWARD DERATING CURVE