FS11PL THRU FS17PL

SURFACE MOUNT FAST RECOVERY RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

FEATURES

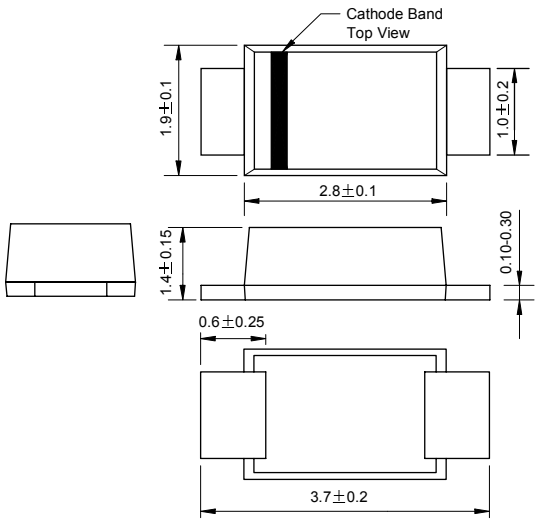
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Fast switching for high efficiency
- Low reverse leakage
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250℃/10 seconds at terminals

MECHANICAL DATA

- Case: SOD-123FL, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.017 grams

RoHS Compliant

SOD-123FL



Dimensions in inches and (millimeters)

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%.

Characteristic	*SYMBOLS*	FS11PL	FS12PL	FS13PL	FS14PL	FS15PL	FS16PL	FS17PL	UNITS
	Marking code	F1	F2	F3	F4	F5	F6	F7	
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 at T_{tp}=65 °C / T_A=45 °C / T_J=45 °C	$I_{(AV)}$	1.4 / 0.5 / 1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0							A
Maximum instantaneous forward voltage at 0.7A / 1.0A	V_F	1.15 / 1.30							V
Maximum DC reverse current T_A=25°C / at rated DC blocking voltage T_A=55°C	I_R	5.0 / 50.0							μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	150				250	500		ns
Typical junction capacitance (NOTE 2)	C_J	9							pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	50.0							°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150							°C

Note:1.Reverse recovery condition I_F=0.5A,I_R=1.0A,Irr=0.25A
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3.P.C.B. mounted with 3.0x3.0mm copper pad areas

FS11PL THRU FS17PL

RATINGS AND CHARACTERISTIC CURVES

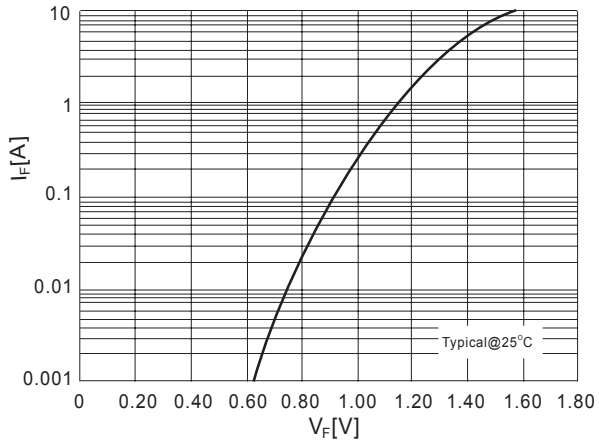


FIG.1-TYPICAL FORWARD CHARACTERISTICS

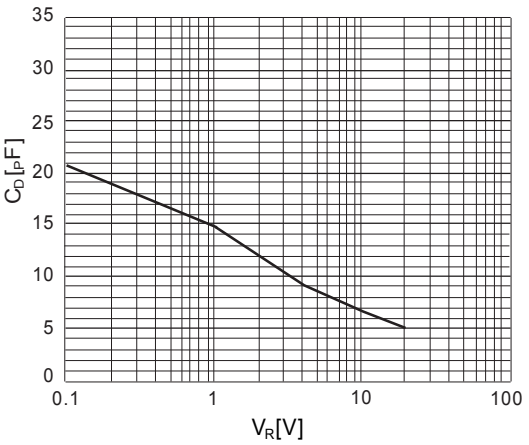


FIG.2 -TYPICAL JUNCTION CAPACITANCE

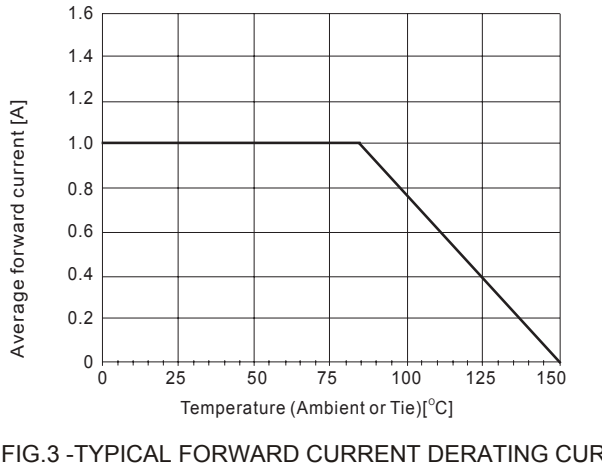


FIG.3 -TYPICAL FORWARD CURRENT DERATING CURVE