



# FS11PL THRU FS17PL

## SURFACE MOUNT FAST RECOVERY RECTIFIER

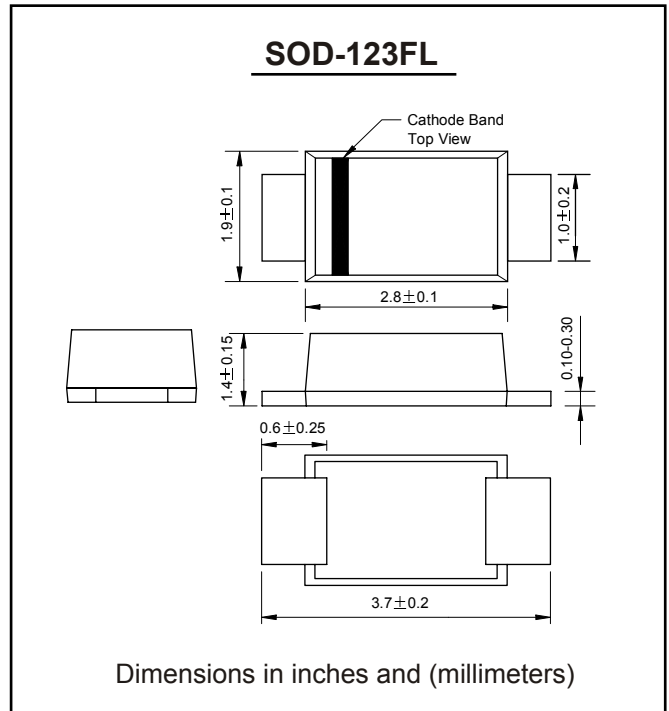
Reverse Voltage - 50 to 1000 Volts    Forward Current - 1.0 Ampere

### 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°C/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



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C 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	$V_{bc}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at <small><math>T_{ip}=65^{\circ}C</math> <math>T_A=45^{\circ}C</math> <math>T_J=45^{\circ}C</math></small>	$I_{(AV)}$				1.4				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 <small>0.7A 1.0A</small>	$V_F$				1.15 1.30				V
Maximum DC reverse current <small><math>T_A=25^{\circ}C</math> at rated DC blocking voltage <math>T_A=55^{\circ}C</math></small>	$I_R$				5.0 50.0				$\mu A$
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				$^{\circ}C/W$
Operating junction and storage temperature range	$T_J, T_{STG}$				-55 to +150				$^{\circ}C$

**Note:** 1. Reverse recovery condition  $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$   
 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



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## RATINGS AND CHARACTERISTIC CURVES

