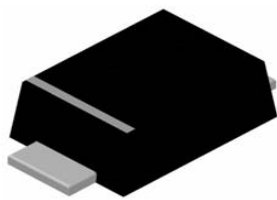


**SOD-123FL**


Symbol

**Features**

Low capacitance  
 Cannot be damaged by voltage  
 Will not fatigue  
 Eliminate voltage overshoot  
 Glass passivated junction  
 Halogen free and RoHS compliant

**Mechanical Data**

CASE: SMF(SOD-123FL) Molded Plastic  
 UL Flammability Classification Rating 94V0  
 Mounting Position:Any

**Making Code & information**

	<b>Package</b>	<b>Packing Description</b>	<b>Packing Quantity</b>
	SMF	Tape/Reel,7" reel	3000

**Maximum Ratings & Thermal Characteristics**

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Units	Remarks
Peak Pulse Voltage	$V_{PP}$	1800	V	10/700us
Peak Pulse Current	$I_{PP}$	40	A	10/1000us
Peak Pulse Current	$I_{PK}$	150	A	8/20us
Peak One-cycle Surge Current	$I_{TSM}$	20	A	60Hz
Rate of Rise of Current	di/dt	500	A/us	
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	30	°C/W	
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	120	°C/W	
Operating Temperature Range	$T_J$	-40 to 150	°C	
Storage Temperature Range	$T_{STG}$	-55 to 150	°C	

**Electrical Characteristics**

(Ratings at 25°C ambient temperature unless otherwise specified.)

Part Number	Marking	$V_S@100KV/S$ V MAX	$I_{S\_LMT}$ mA	$V_T @ I_T$ V MAX	$I_T$ A	$I_D @ V_D$ uA MAX	$V_D$ V	$C_O@1MHz,2V_{DC}$ pF TYP	$I_H$ mA MIN
P0300F	P03F	25	500	4	2.2	5	15	35	30

## Ratings and Characteristic Curves

(Ratings at 25°C ambient temperature unless otherwise specified).

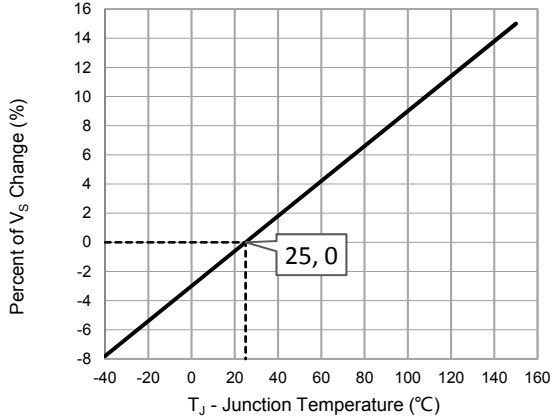


Fig.1 - Peak Pulse Current Rating

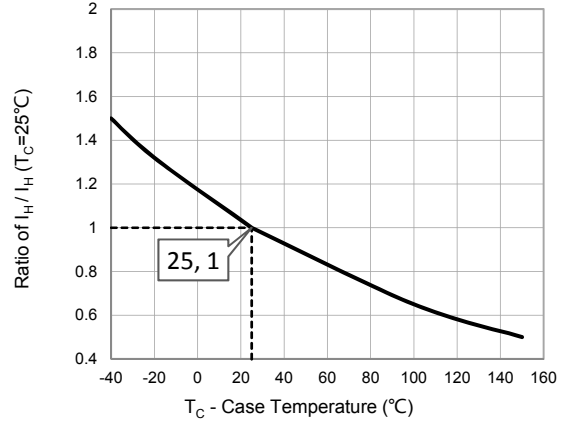


Fig.2 - Normalized DC Holding Current vs. Case Temperature

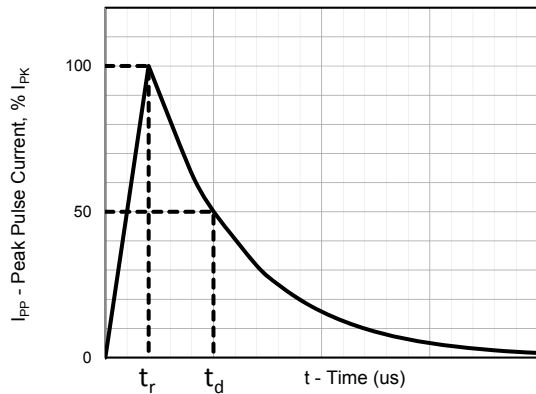


Fig.3 - tr/td us Pulse Waveform

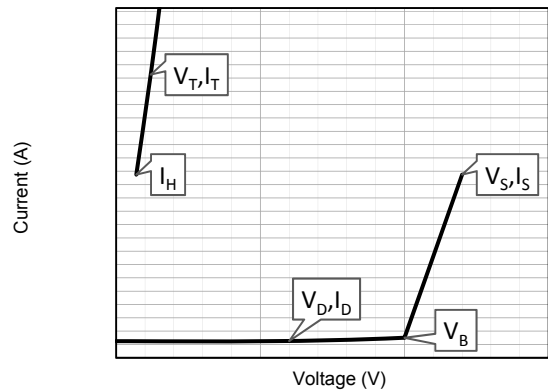


Fig.4 - VI Curve

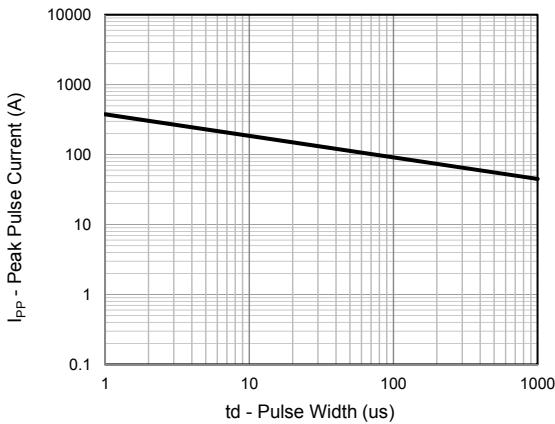


Fig.5 - Peak Pulse Current Rating

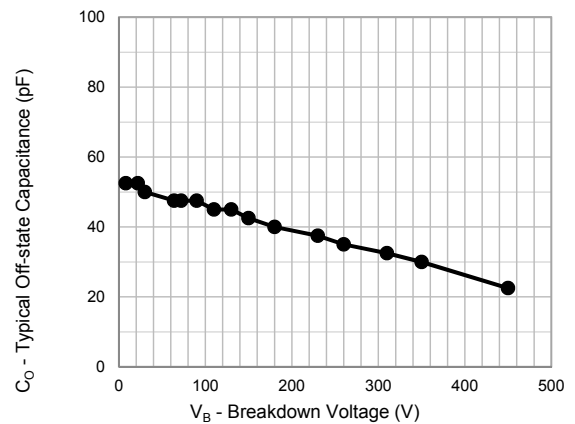
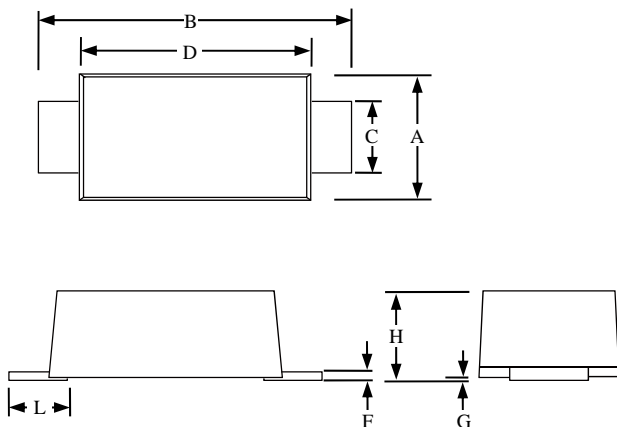


Fig.6 - Typical Off-state Capacitance

## Package Outline Dimensions: SMF(SOD-123FL)



Dimension	SOD-123FL					
	Inches			Millimeters		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.059		0.079	1.5		2
B	0.134		0.154	3.4		3.9
C	0.028		0.047	0.7		1.2
D	0.098		0.114	2.5		2.9
F	0.002		0.01	0.05		0.26
G	-		0.004	-		0.1
H	0.037		0.053	0.95		1.35
L	0.014		0.035	0.35		0.9