

Features

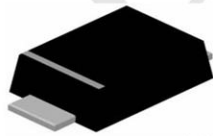
- For surface mounted applications
- Low profile package
- Low incremental surge resistance, excellent clamping capability
- 200W peak pulse power capability with a 10/1000 μ s wave from, repetition rate (duty cycle): 0.01%
- High temperature soldering guaranteed: 260 °C/10 seconds, at terminals

Mechanical Data

- Case : SOD-123FL Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0006 ounces, 0.017 grams
- Shipping Qty : 3000 pcs/7 Inch Tape & Reel

Dimensions and Pin Configuration

SOD123FL



Marking: CCK

Maximum Ratings (T_A = 25 °C unless otherwise noted)

Characteristic	Symbol	Value	Unit
Maximum P _{PK} Dissipation (PW - 10/1000 μ s)	P _{PK}	200	W
Maximum P _{PK} Dissipation @ Ta = 25 °C (PW - 8/10 μ s) (Note 2)	P _{PK}	1000	W
DC Power Dissipation @ Ta = 25 °C (Note 3)	P _D	385	mW
Derate above 25 °C		4.0	mW/°C
Thermal Resistance, Junction to Ambient (Note 3)	R _{θJA}	325	°C/W
Thermal Resistance, Junction to Lead (Note 3)	R _{θJL}	26	°C/W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

Electrical Characteristics

TYPE	Reverse Stand-Off Voltage	Breakdown Voltage Min. @ I_T	Breakdown Voltage Max. @ I_T	Test Current	Reverse Leakage @ V_{RWM}	Maximum Clamping Voltage @ I_{PP}	Peak Pulse Current
	V_{RWM} (V)	$V_{BR MIN}$ (V)	$V_{BR MAX}$ (V)	I_T (mA)	I_R (uA)	V_C (V)	I_{PP} (A)
PDCV300JB	30	33.3	36.8	1.0	1.0	48.4	4.1

Rating and Characteristic Curves

Rating and Characteristic Curves

FIG.1 - PULSE DERATING CURVE

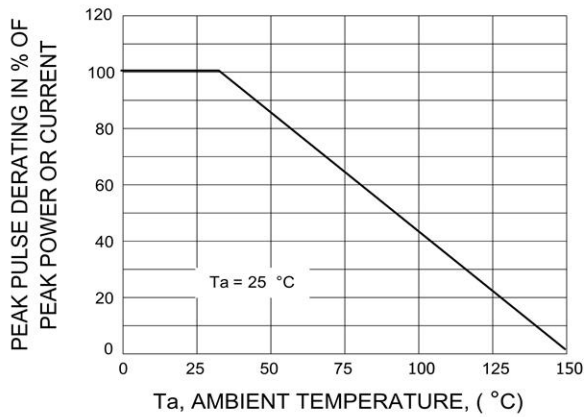


FIG.2 - 10 x 1000 μ s PULSE WAVEFORM

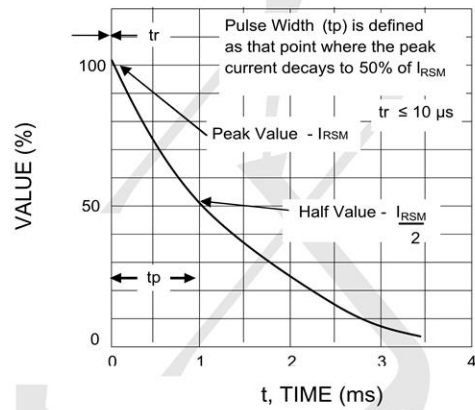


FIG.3 - STEADY STATE POWER DERATING

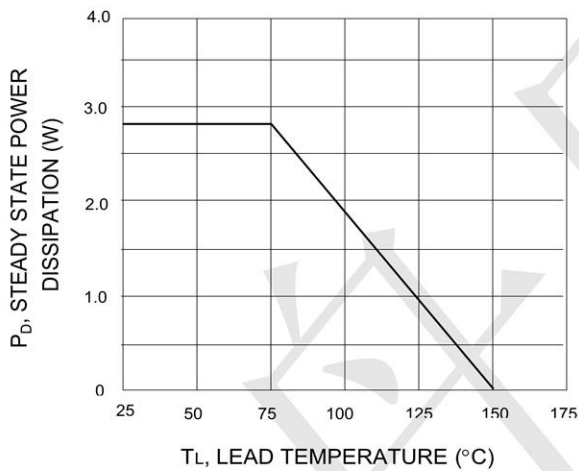


FIG.4 - PULSE RATING CURVE

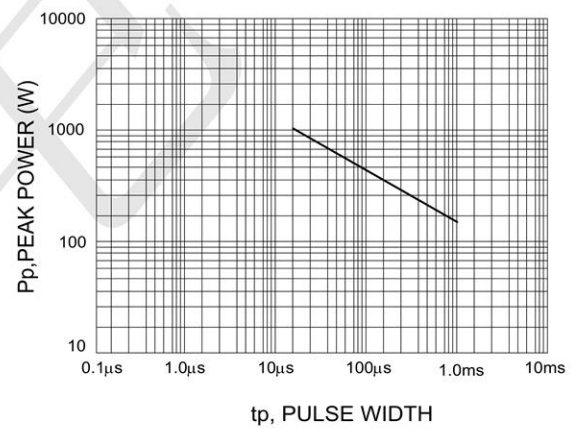


FIG.5 - 8 x 20 μ s PULSE WAVEFORM

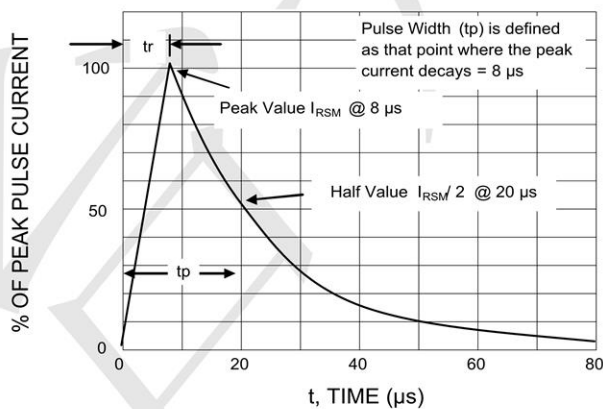
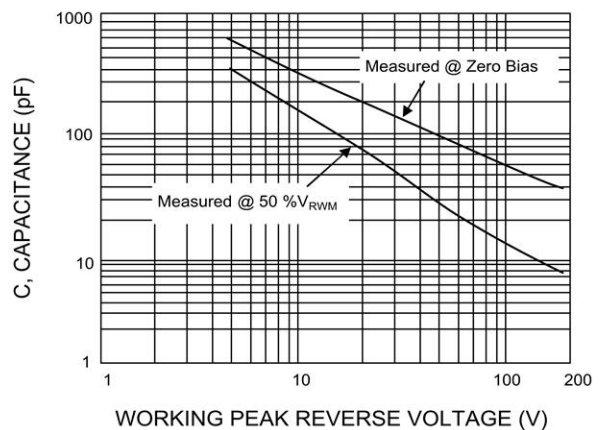
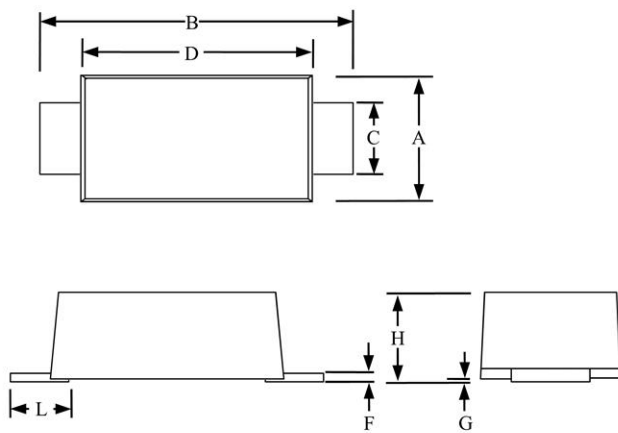


FIG. 6 - CAPACITANCE VS. WORKING PEAK REVERSE VOLTAGE



Package Outline Dimensions: SOD123FL



SOD-123FL						
Dimension	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