

FEATURES

- | Excellent capability of absorbing transient surge
- | Quick response to surge voltage
- | Eliminates over voltage caused by fast rising transients
- | Solid-state silicon technology, non degenera



SOD-123FL



Schematic Symbol

APPLICATIONS

- | Audio/Video line
- | Network and telecom
- | Data lines and security systems
- | Serial ports

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

ELECTRICAL CHARACTERISTICS

Part Number	Marking	V_{DRM}	V_S	V_T	I_{DRM}	I_S	I_T	I_H	C_o
		Min. (V)	Max. (V)	Max. (V)	Max. (μA)	mA	Max. (A)	Min. (mA)	Typ.(pF)
P1300FA	P13A	120.0	160.0	4.0	5.0	800.0	2.2	100.0	35.0

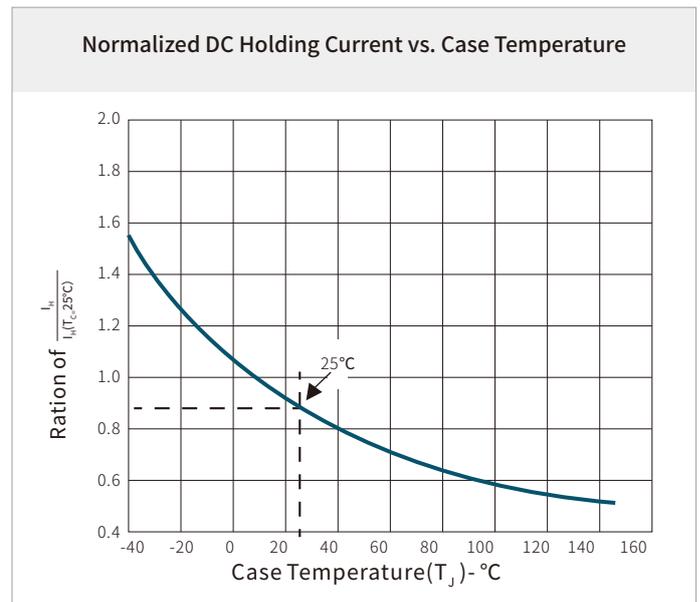
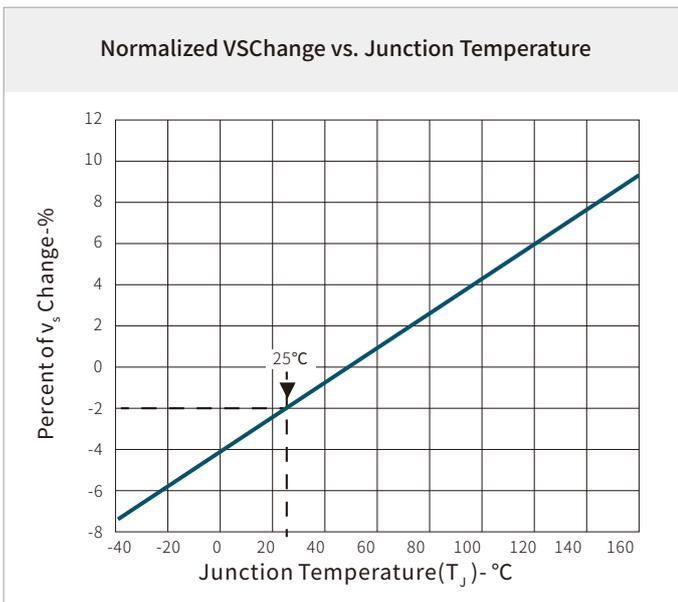
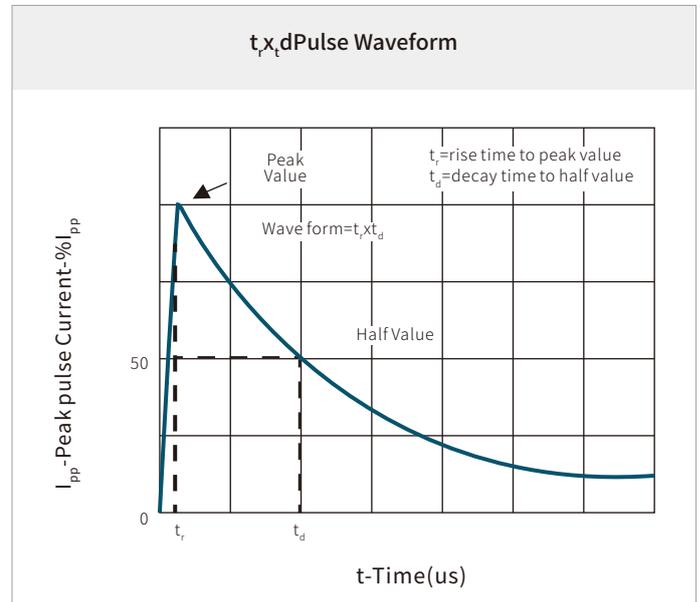
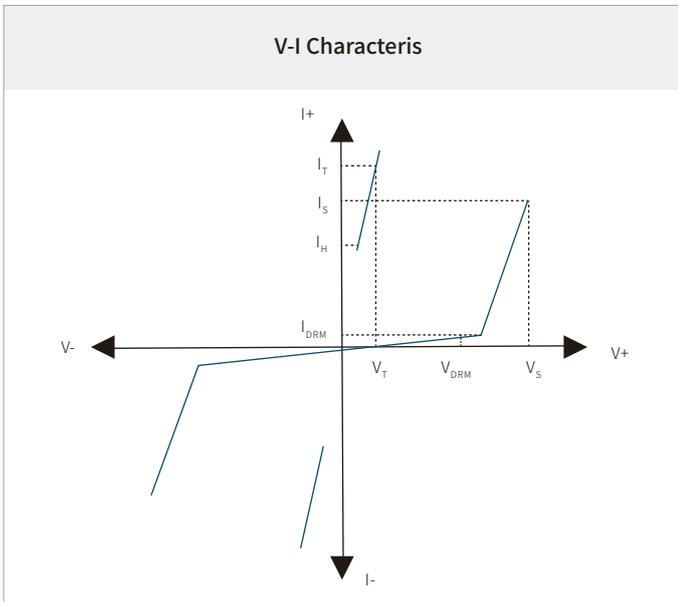
SURGE RATINGS

Part Number	I_{PP} 2x10 μs	I_{PP} 8x20 μs	I_{PP} 10x560 μs	I_{PP} 10x1000 μs	V_{PP} 10x700 μs	I_{TSM} 50/60Hz	d_i/d_t
	(A)	(A)	(A)	(A)	(V)	(A)	(A/ μs)
P1300FA	150	150	100	45	3000	20	500

THERMAL CONSIDERATIONS

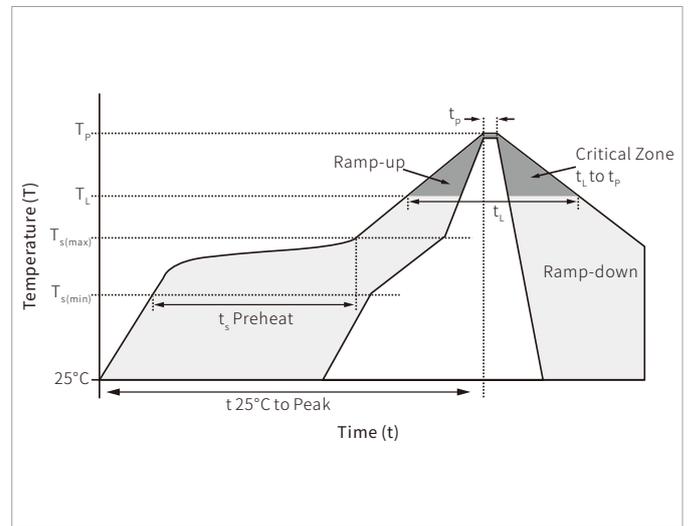
Symbol	Parameter	Value	Unit
$R_{\theta JA}$	Junction to Ambient on printed circuit	220	°C/W
T_J	Operating Junction Temperature	-55 to +125	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

RATINGS AND CHARACTERISTIC CURVES ($T_A=25^\circ\text{C}$)

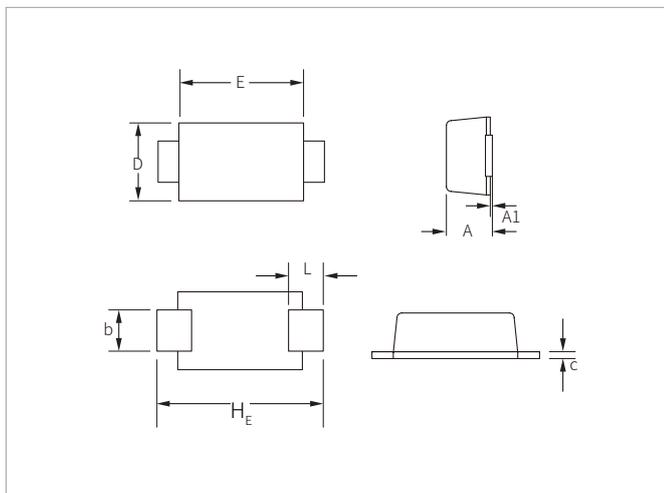


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

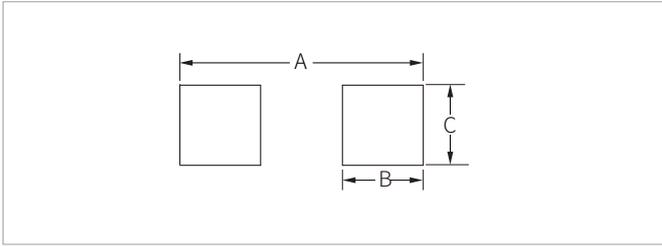


SOD-123FL PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.95	1.45	0.037	0.057
A1	0.00	0.10	0.000	0.004
b	0.70	1.20	0.028	0.047
c	0.05	0.30	0.002	0.012
D	1.50	2.00	0.059	0.079
E	2.50	2.90	0.098	0.114
L	0.35	0.90	0.014	0.035
H _E	3.40	3.90	0.134	0.154

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters	Inches
A	4.20	0.165
B	1.50	0.059
C	1.20	0.047

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
P1300FA	SOD-123FL	3000PCS	7"

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