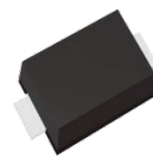


FEATURES

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

APPLICATIONS

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



SOD-123FL



Marking



Schematic Symbol

APPROVALS

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

THERMAL CONSIDERATIONS

Parameter	Symbol	Value	Unit
Operating Junction Temperature	T_J	-40 to +125	°C
Storage Temperature Range	T_{STG}	-40 to +150	°C
Junction to Ambient on Printed circuit	$R_{\theta JA}$	120	°C/W

ELECTRICAL CHARACTERISTICS

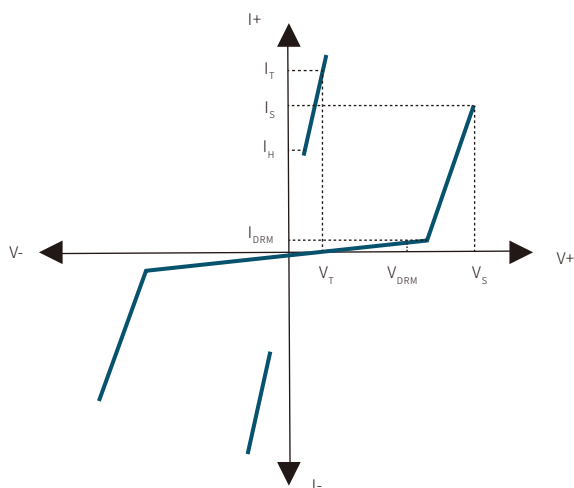
Part Number	V_{DWN}	I_{DRM}	V_S	I_S	V_T	I_T	I_H	C_o
	Min.(V)	Max.(uA)	Max.(V)	(mA)	Max.(V)	Max.(A)	Min.(mA)	Typ.(pF)
P0300FM	25.0	5.0	40.0	800	4.0	2.2	50.0	60.0

SURGE RATINGS

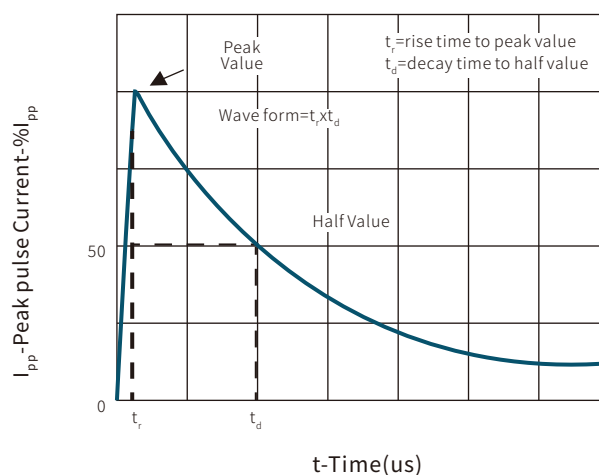
Part Number	V_{PP} 10x700uS
	(V)
P0300FM	2000

CHARACTERISTIC CURVES

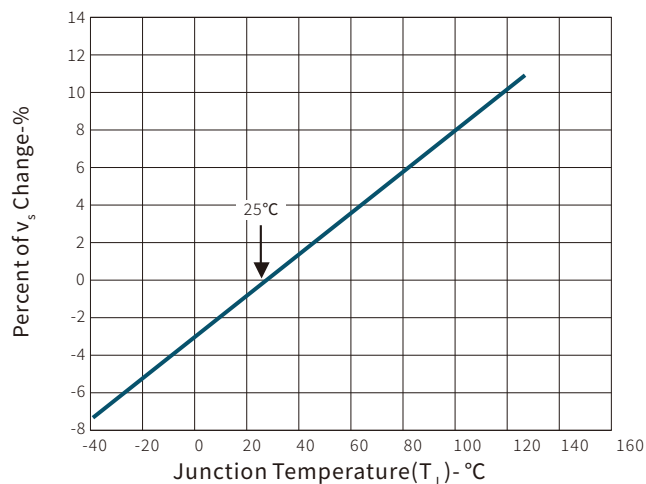
V-I Characteris



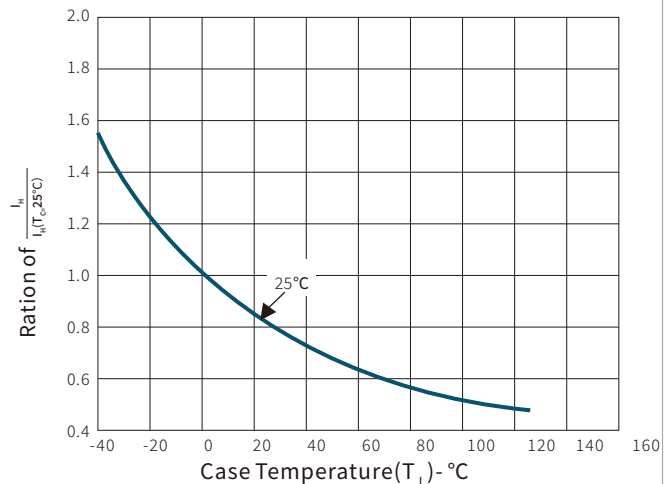
t_r, t_d Pulse Waveform



Normalized VSChange vs. Junction Temperature

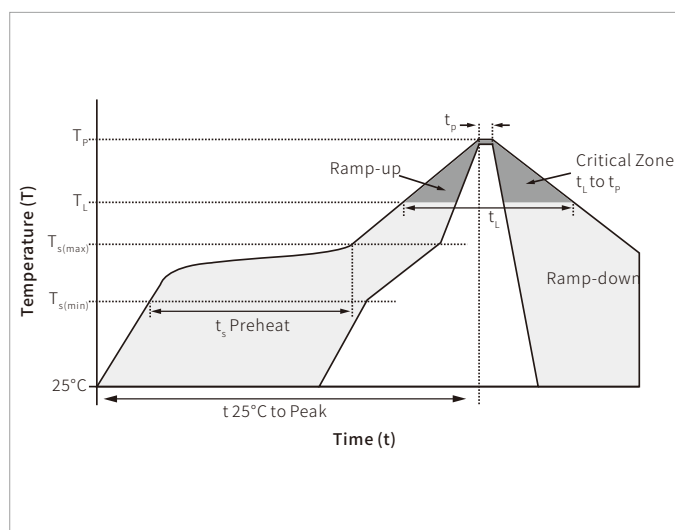


Normalized DC Holding Current vs. Case Temperature

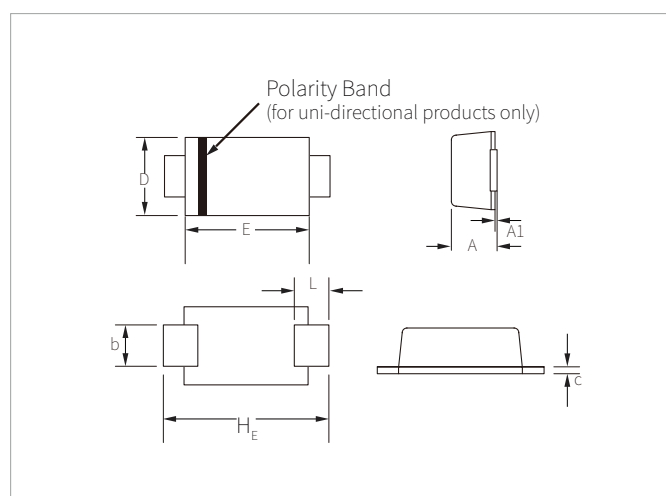


SOLDERING PARAMETERS

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

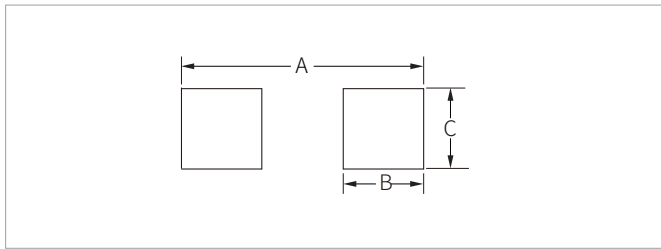


SOD-123FL PACKAGE INFORMATION



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	3.10	0.098	0.122
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
P0300FM	SOD-123FL	3000PCS	7"

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