

#### **FEATURES**

| Excellent capability of absorbing transient surge

| Quick response to surge voltage

| Eliminates over voltage caused by fast rising transients

| Solid-state silicon te chnology, non degenera



SOD-123FL

Marking



Schematic Symbol

### **APPLICATIONS**

### **APPROVALS**

HF

**RoHS** Compliance with 2011/65/EU

Compliance with IEC61249-2-21:2003

Audio/Video line	
Network and telecom	
Data lines and security systems	

Serial ports

## **ELECTRICAL CHARACTERISTICS**

Part Number	$V_{_{\mathrm{DRM}}}$	$V_s$	$V_{\scriptscriptstyle T}$	I <sub>DRM</sub>	I <sub>s</sub>	I <sub>T</sub>	I <sub>H</sub>	$C_{\circ}$	$C_{\circ}$
	Min. (V)	Max. (V)	Max. (V)	Мах. (µА)	mA	Max. (A)	Min. (mA)	Min.(pF)	Max.(pF)
P0080FA-S	6.0	25.0	4.0	5.0	800.0	2.2	40.0	15.0	35.0

### **SURGE RATINGS**

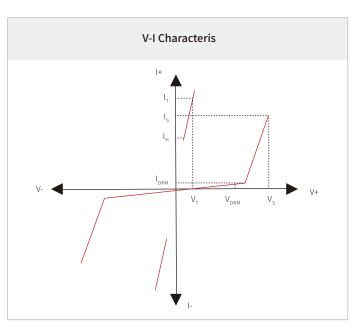
Part Number	V <sub>PP</sub> 10x700us (V)	I <sub>PP</sub> 5x310us (A)
P0080FA-S	2000	50

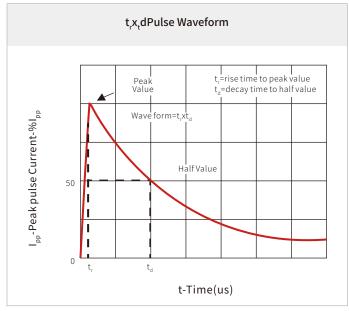


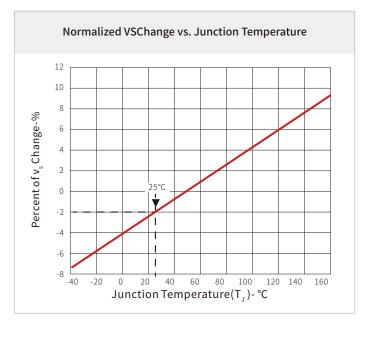
### THERMAL CONSIDERATIONS

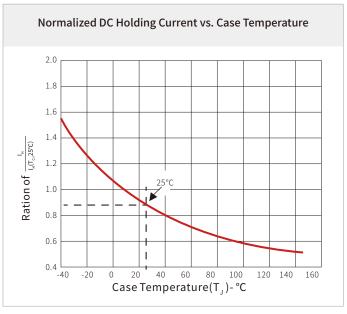
Symbol	Parameter	Value	Unit
$R_{\theta JA}$	Junction to Ambient on printed circuit	220	°C/W
T <sub>J</sub>	Operating Junction Temperature	-55 to +125	°C
$T_{STG}$	Storage Temperature Range	-55 to +150	°C

# RATINGS AND CHARACTERISTIC CURVES ( $T_A = 25$ °C)





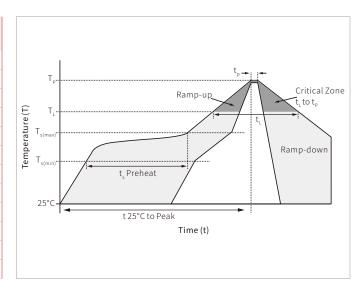




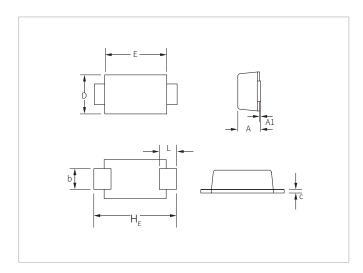


### **SOLDERING PARAMETERS**

	Reflow Condition	Lead-free assembly
	Temperature Max (T <sub>s(min)</sub> )	150°C
Pre Heat	Temperature Max (T <sub>s(max)</sub> )	200°C
	Time (min to max) $(t_s)$	60 – 180 secs
Average rar	mp up rate (Liquidus Temp ( $T_L$ ) to peak	3°C/second max
	T <sub>s(max)</sub> to T <sub>L</sub> - Ramp-up Rate	3°C/second max
Reflow	Temperature (T」) (Liquidus)	217°C
Kellow	Time (min to max) (t₁)	60 – 150 seconds
Peak Tem	nperature (T₅)	260°C
Time with	nin 5°C of actual peak Temperature (t <sub>p</sub> )	20 – 40 seconds
Ramp-do	own Rate	6°C/second max
Time 25°	C to peak Temperature (T٫)	8 minutes max.
Do not ex	cceed	260°C



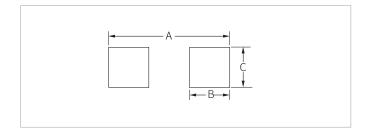
### **SOD-123FL PACKAGE INFORMATION**



	Ref.	Millim	neters	Inches		
		Min.	Max.	Min.	Max.	
	А	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	
	С	0.05	0.30	0.002	0.012	
	D	1.50	2.00	0.059	0.079	
	Е	2.50	3.10	0.098	0.122	
	L	0.35	0.90	0.014	0.035	
	H <sub>E</sub>	3.40	3.90	0.134	0.154	



### **RECOMMENDED PAD LAYOUT DIMENSIONS**



Ref.	Millimeters	Inches
А	4.20	0.165
В	1.50	0.059
С	1.20	0.047

### **ORDERING INFORMATION**

Part Number	Component Package	QTY/Reel	Reel Size
P0080FA-S	SOD-123FL	3000PCS	7"



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#### By QR Code





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Machat

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