

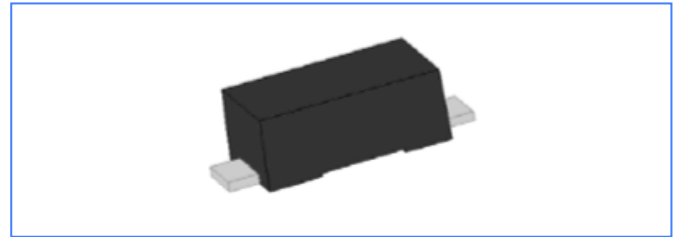
P0400DA SOD-123FL

Description

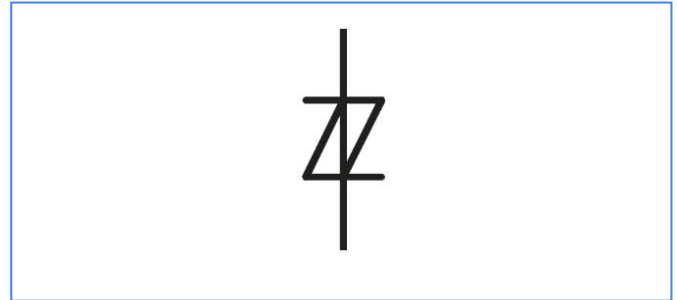
Thyristors are a type of semi—conduct component. They are designed to protect baseband equipment from damaging overvoltage transients. such as modems, telephones, line cards, answering machines, FAX machines, T1/E1, xDSL and more.

Features

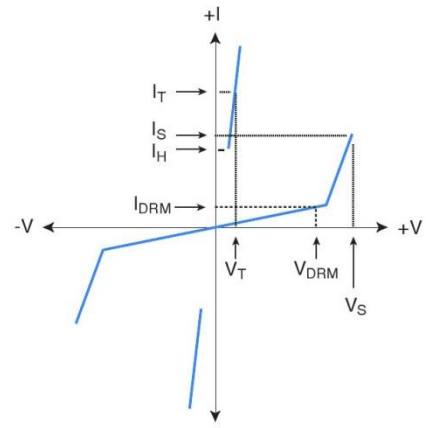
- Excellent capability of absorbing transient surge
- Quick response to surge voltage (ns Level)
- Eliminates overvoltage caused by fast rising transients
- Moisture sensitivity level: Level 1
- Fails short circuit when surged in excess of ratings
- Non degenerative



Device Symbol



Typical Applications

Parameter	Definition	
V_{DRM}	Peak Off-state Voltage – maximum voltage that can be applied while maintaining off state	
V_S	Switching Voltage – maximum voltage prior to switching to on state	
V_T	On-state Voltage – maximum voltage measured at rated on-state current	
I_{DRM}	Leakage Current – maximum peak off-state current measured at V_{DRM}	
I_S	Switching Current – maximum current required to switch to on state	
I_T	On-state Current – maximum rated continuous on-state current	
I_H	Holding Current – minimum current required to maintain on state	
C_o	Off-state Capacitance – typical capacitance measured in off state	
I_{PP}	Peak Pulse Current – maximum rated peak impulse current	

Thermal Consideration

Parameter	Symbol	Value	Unit
Operating Temperature	T_J	-40 to +125	°C
Storage Temperature	T_{STG}	-40 to +125	°C
Junction to free air thermal resistance	$R_{\theta JA}$	90	W/°C

Summary Electrical Characteristics, $T_a = 25^\circ\text{C}$ (Unless Otherwise Noted)

Parameter Description	$I_{DRM}@V_{DRM}$		$V_{BR}@1\text{mA}$	$V_S^{①}@I_S$		$V_T@I_T$		I_H	$C_o^{②}$
Unit	μA	V	V	V	mA	V	A	mA	pF
Type	Max.	Min.	Min.	Max.	Max.	Max.	Max.	Min.	Max.
P0400DA	1	33	35	50	800	4	2.2	40	40

① V_S is measured at 100KV/s

② Off-state capacitance is measured in $V_{DC}=2\text{V}$, $V_{RMS}=1\text{V}$, $f=1\text{MHz}$

Surge Ratings

Type	Wave Sharp		VPP
IEC6100-4-5	Voltage	10/700 μs	2000V

Rating & Characteristic Curves

Figure 1- Reflow Soldering

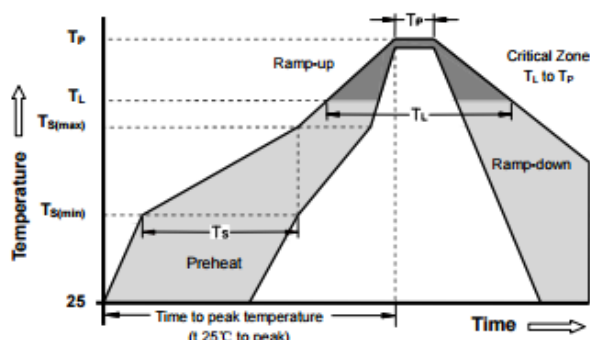


Figure 2- PEAK PULSE CURVE

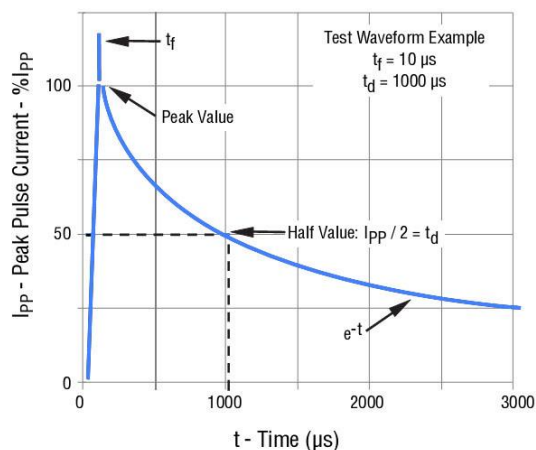


Figure 3-Normalized DC Holding Current versus Case Temperature

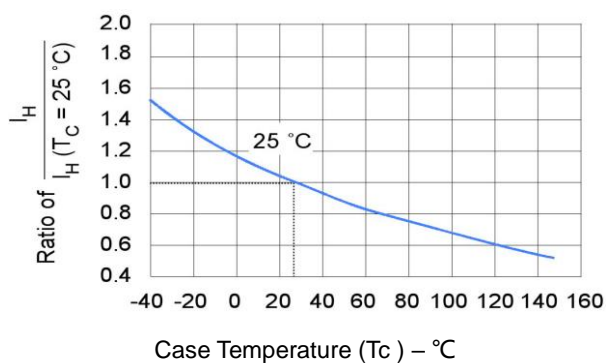
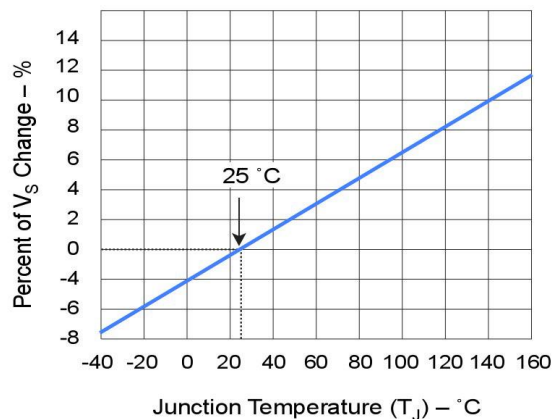
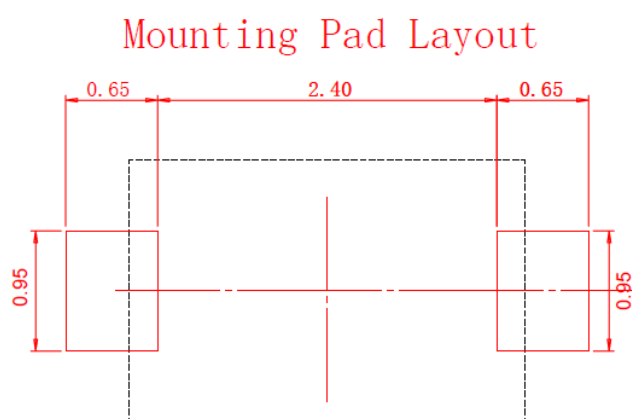
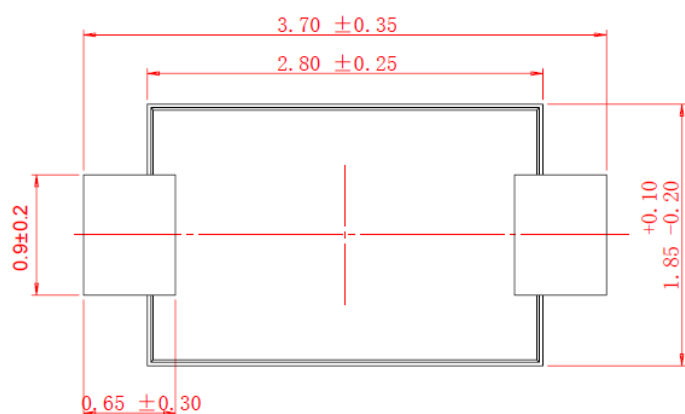
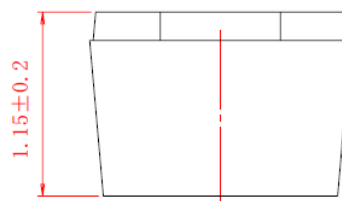
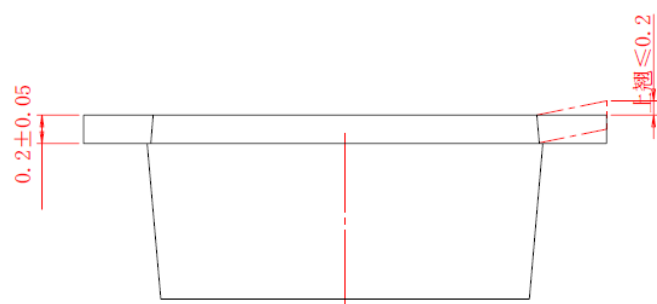


Figure 4-Normalized vs change versus Junction Temp



PACKAGE OUTLINE DIMENSIONS in millimeters



Disclaimer

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

Users should verify actual device performance in their specific applications.