JX0060TC Series
Thyistor Surge Protector

Features

- Bi-directional crowbar transient voltage protection
- High surge capability
- High off-state impedance
- Low leakage current
- Low on-state voltage
- Short-circuit failure mode
- Ultra Low Capacitance



DO-214AC(SMA)

Main Application

Juxing's thyristor surge protector devices are designed to help protect sensitive telecommunication equipment from the hazards caused by lighning ,power contact,and power induction. These devices enable equipment to comply with various regulatory requirements including GR 1089,ITU K.20,K.21and K.45,IEC 60950,UL 60950,and TIA-968-A(formerly known as FCC Part 68).

Typical application including:

- Central office switching equipment. Analog and digital linecards(xDSL,T1/E1,ISDN……)
- Customer Premises Equipment (CPE) such as phones, fax machines, modems, POS terminals, PBX systems and caller ID adjunct boxes.
- Primary protection modules including Main Distribution Frames (MDF), building entrance equipment and station protection modules.
- Access network equipment such as remote terminals, line repeaters, multiplexers, cross-connects, WAN equipment, Network Interface Devices (NID).
- Data lines and security systems.
- CATV line amplifiers and power inserters.
- Sprinkler systems.

Electrcal Parameters (Tamb=25℃)

Part Number	V_{DRM}	I_{DRM}	V_{BO}	I_{BO}	V_T	I_T	C_O	`I_H
	Min.	Max.	Max.	Max.	Max.	Max.	Typ.	Min.
	V	uA	V	mA	V	A	pF	mA
JX0060TC	6	3	20	800	4	2.2	40	25

Eletrical Characteristics

V_{DRM}	Stand-off voltage,is measured at IDRM	I_H	Holding current.
V_{BO}	Breakover voltage,is measured at 100V/μs.	I_{BO}	Breadover current.
Co	Off-state capacitance ismeasured in V_{DC}=2V@1MHz.	I_T	ON-state current
IDRM	Leakage current,is measured at VDRM.	VT	On-state voltage.

Part Numbering System

JX	XXX	T	C
(A)	(B)	(C)	(D)

(A) Juxing's Semiconductor Surge Arrester.

(B) Series:0060etc.

(C) T:Package:DO-214AC(SMA)

(D) Rating Sure Voltage:C:≧6KV(10/700μs)

Thermal Considerations

Package DO-214AC/SMA	Symbol	Parameter	Value	Unit
	T_J	Operating Junction Temperature	-40 to +150	℃
	T_S	Storage Temperature Range	-40 to +150	℃
	$R_{\theta JA}$	Junction to Ambient on printed circuit	90	℃/W

Electrical Characteristics Curves

Figure1 V-I Characteristics

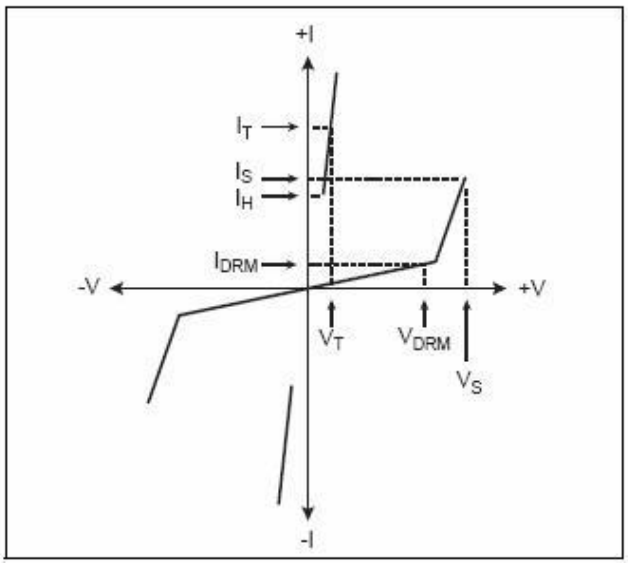


Figure2 tr x td Pulse Wave-form

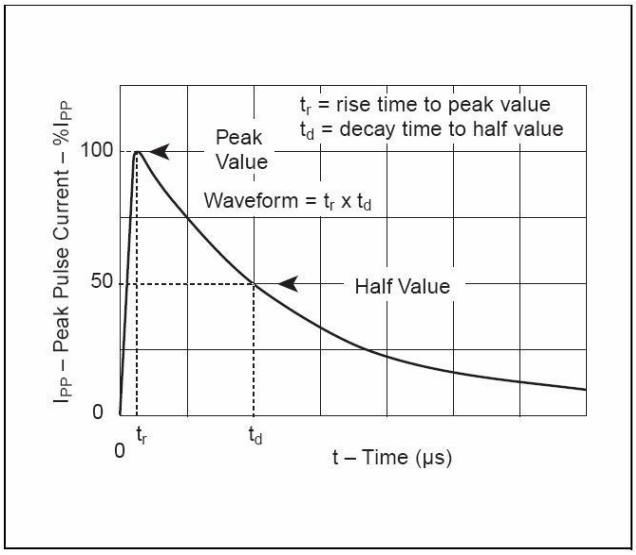


Figure 3 Normalized V_S Change versus Junction Temperature

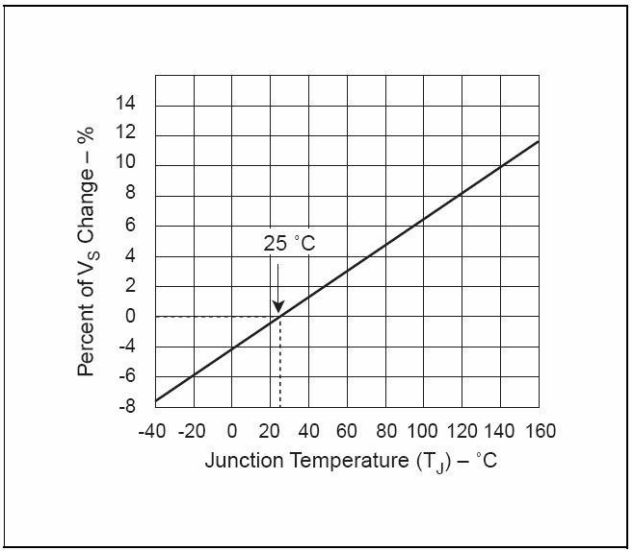
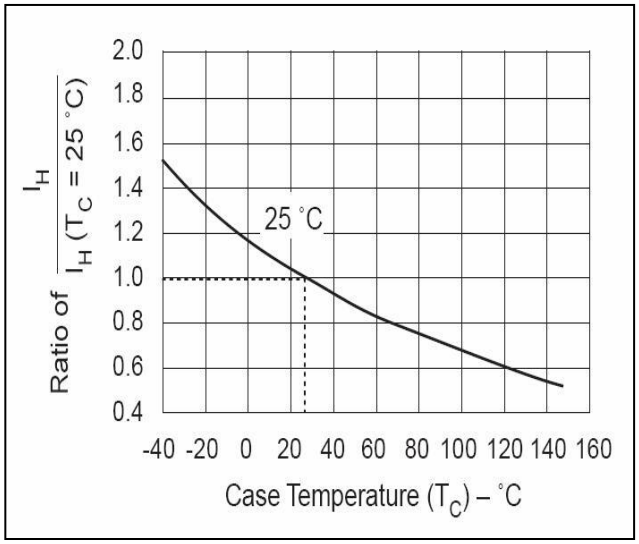
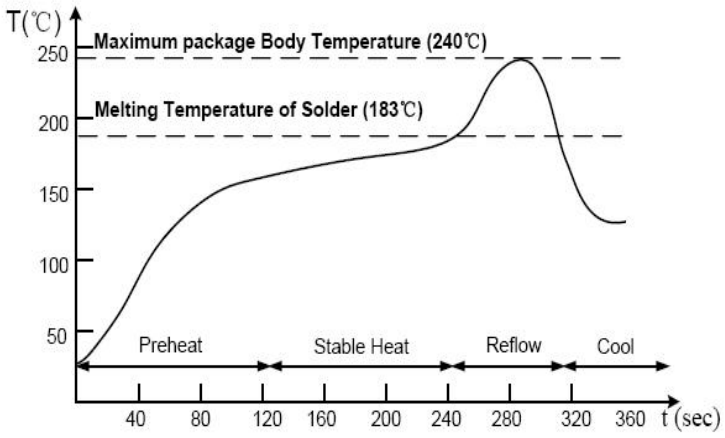


Figure 4 Normalized DC Holding Current



Solder Reflow Recommendations

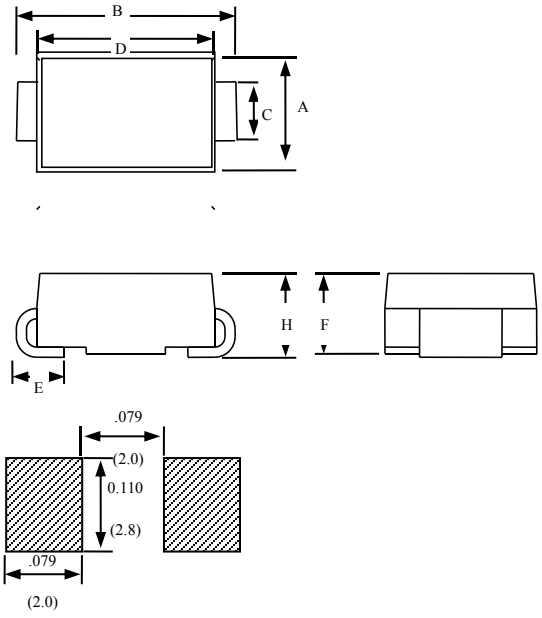


- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 265°C for 10 seconds.
- Devices can be cleaned using standard industry methods and solvents.

Notes: If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Product Dimensions

Dime-nsion	Inches		Millimeters	
	MIN	MAX	MIN	MAX
A	0.098	0.114	2.50	2.90
B	0.188	0.208	4.80	5.28
C	0.055	0.062	1.40	1.60
D	0.157	0.181	4.00	4.60
E	0.030	0.060	0.76	1.52
F	0.078	0.096	2.00	2.44
H	0.080	0.104	2.051	2.643



Summary of Packing Options

Package Type	Description	Packing Quantity	Industry Standard
DO-214AC(SMA) 	Embossed Carrier Reel Pack	5000PCS	EIA-481-D