

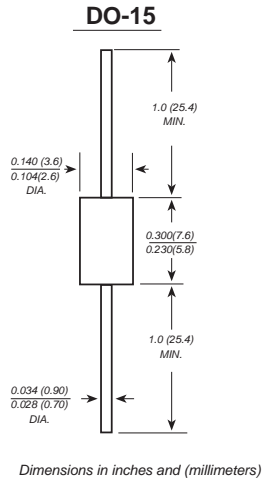
TPA62 THRU TPA270

SOLID STATE TELECOMMUNICATION PROTECTION ARRESTOR

Breakdown Voltage - 62 to 270 Volts Holding Current - 150 Milliampere

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Bidirectional crowbar protection
- ◆ Fast response
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



MECHANICAL DATA

Case: JEDEC DO-15 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Mounting Position: Any
Weight: 0.014 ounce, 0.40 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

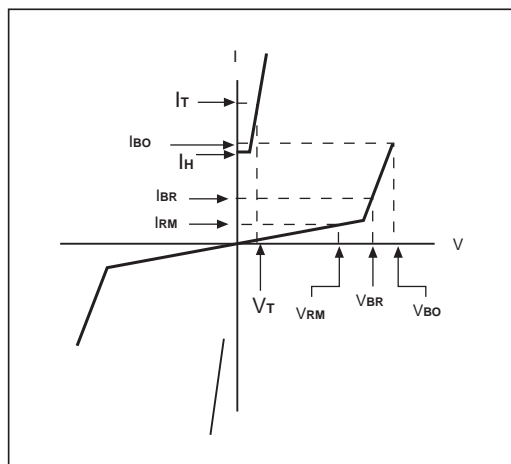
	SYMBOLS	TPA 62	TPA 68	TPA 100	TPA 120	TPA 130	TPA 180	TPA 200	TPA 220	TPA 240	TPA 270	UNITS	
Breakdown voltage ($I_R=1\text{mA}$)	V_{BR}	62	68	100	120	130	180	200	220	240	270	VOLTS	
Maximum breakover voltage ($I_{BO}=800\text{mA}$)	V_{BO}	82	90	133	160	173	240	267	293	320	360	VOLTS	
Maximum off-state voltage	V_{RM}	56	61	90	108	117	162	180	198	216	243	VOLTS	
Maximum on-state current ($I_T=1\text{A}$)	V_T	2	4									VOLTS	
Maximum off-state current @ V_{RM}	I_{RM}	2											μA
Minimum holding current	I_H	150											mA
Maximum peak pulse current (10/1000ms)	I_{PP}	50											A
Maximum surge current (50 Hz)	I_{TSM}	25											A
Minimum critical off-state voltage rise rate	dV/dt	2											KV/mS
Typical junction capacitance (Note 1)	C_J	150	100									pF	
Junction teperature	T_J	-40 to +150											°C
Storage temperature	T_{STG}	-40 to +150											°C
Junction to leads on infinite heatsink	R_{qJL}	60											°C/W
Junction to ambient on printed circuit L(lead)=10mmA	R_{qJA}	100											°C/W

Note 1: $F=1\text{MHz}$ $V_R=1\text{V}$

RATINGS AND CHARACTERISTIC CURVES TPA62 THRU TPA270

NOTE1:MEANING OF PARAMETERS

Symbol	Parameter
V_{RM}	Stand-off voltage
V_{BR}	Breakdown voltage
V_{BO}	Breakover voltage
I_H	Holding current
V_T	On-state voltage
I_{BO}	Breakover current
I_{PP}	Peak pulse current



NOTE2:ALL TPA SERIES MEET THE SURGE REQUIREMENTS OF THE FOLLOWING STANDARDS:

CCITTK 17-K20	10/700ms	1.5KV
	5/310ms	38A
VDE0433	10/700ms	2KV
	5/200ms	50A
CNET	0.5/700ms	1.5KV
	0.2/310ms	38A

RATINGS AND CHARACTERISTIC CURVES TPA62 THRU TPA270

FIG.1-PULSE WAVE FORM(10/1000ms)

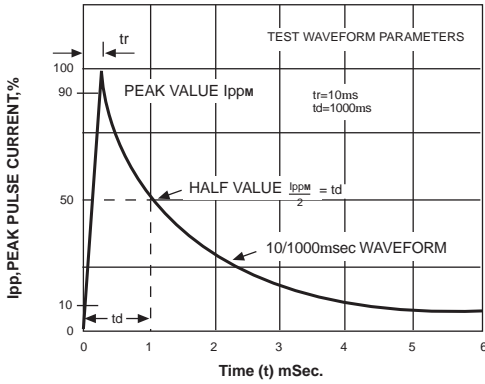


FIG. 2-NORMALIZED DC HOLDING CURRENT VS CASE TEMPERATURE

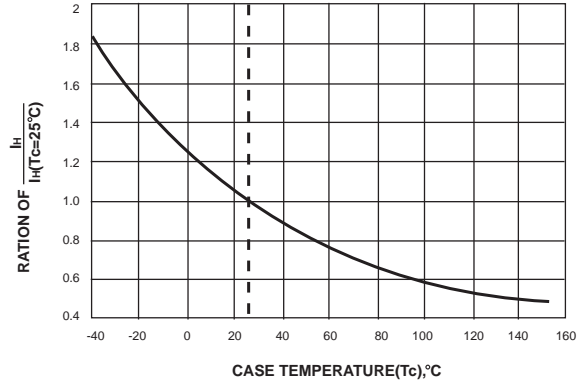


FIG. 3-TYPICAL TRANSIENT THERMAL IMPEDANCE

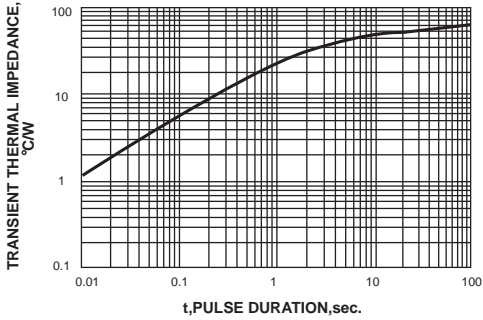


FIG. 4-NORMALIZED V_{BO} CHANGE VS JUNCTION TEMPERATURE

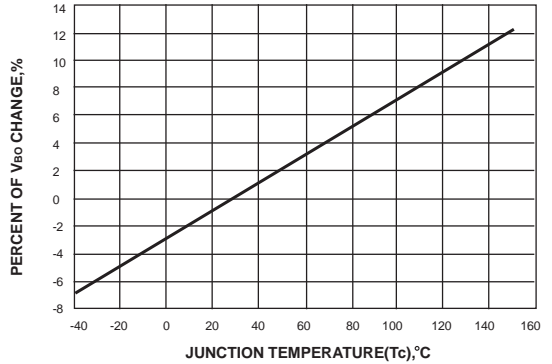


FIG. 5-NON REPETITIVE SURGE PEAK ON-STATE CURRENT VERSUS OVERLOAD DURATION (T_J INITIAL= 25°C)

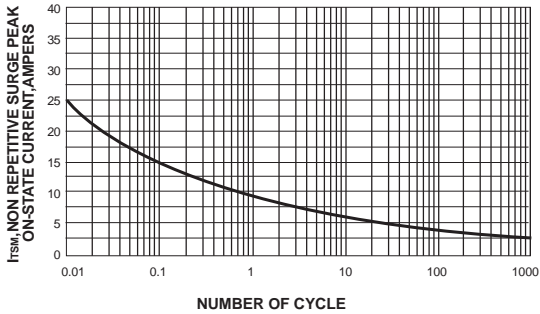


FIG. 6- ON-STATE CURRENT VERSUS ON-STATE VOLTAGE(TYPICAL VALUES).

