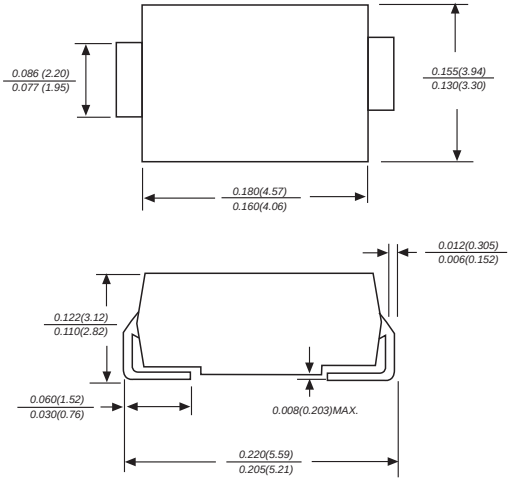
STPA62 THRU STPA270

SOLID STATE TELECOMMUNICATION PROTECTION ARRESTOR

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

DO-214AA



Dimensions in inches and (millimeters)

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℃/10 seconds on terminals

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body
Terminals: Plated leads, solderable per MIL-STD-750, Method 2026
Mounting Position: Any
Weight:0.05 ounce, 0.138grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

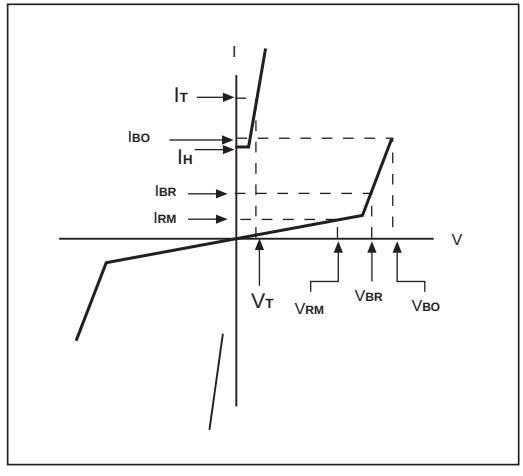
Ratings at 25℃ ambient temperature unless otherwise specified.

	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=1mA)	V_{BR}	62	68	100	120	130	180	200	220	240	270	VOLTS
Maximum breakover voltage (I_{BO}=800mA)	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=1A)	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
Tyipical junction capacitance (Note 1)	C_J	150	100									pF
Junction teperature	T_J	-40 to +150										℃
Storage temperature	T_{STG}	-40 to +150										℃
Junction to leads on infinite heatsink	$R_{\theta JL}$	60										°C/W
Junction to ambient on printed circuit L(lead)=10mmA	$R_{\theta JA}$	100										°C/W

Note 1:F=1MHz V_R=1V

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 STPA 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 STPA62 THRU STPA270

FIG.1-PULSE WAVE FORM(10/1000μs)

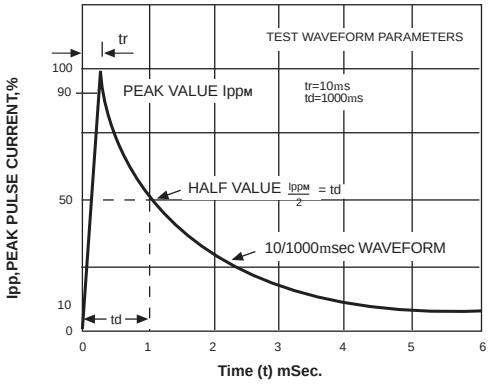


FIG. 2-NORMALIZED DC HOLDING CURRENT VS CASE TEMPERATURE

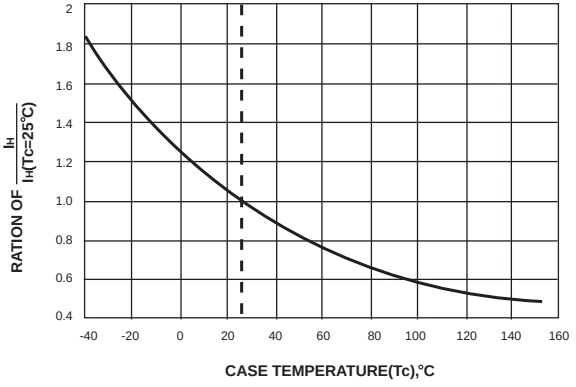


FIG. 3-TYPICAL TRANSIENT THERMAL IMPEDANCE

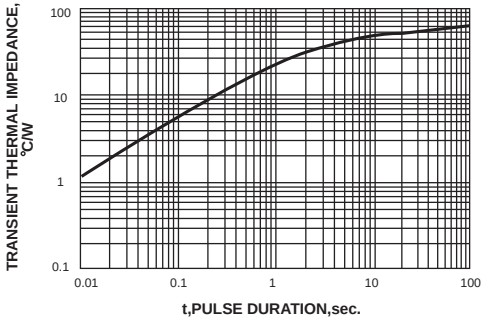


FIG. 4-NORMALIZED VBO CHANGE VS JUNCTION TEMPERATURE

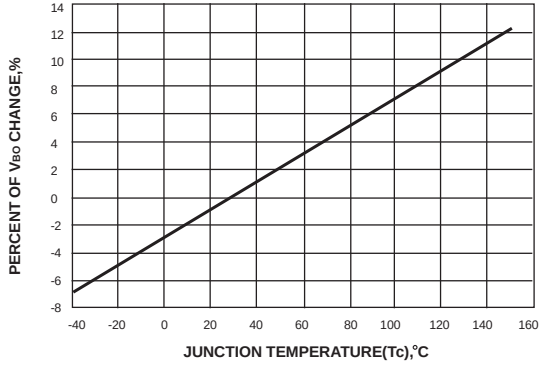


FIG. 5-NON REPETITIVE SURGE PEAK ON-STATE CURRENT VERSUS OVERLOAD DURATION (Tj INITIAL=25°C)

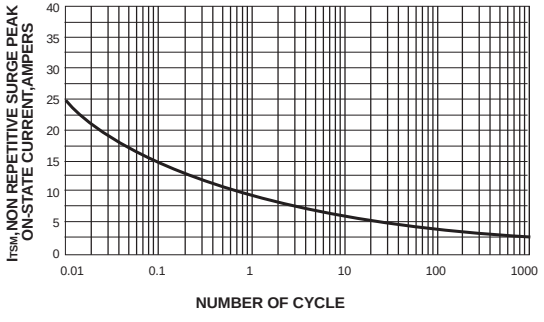


FIG. 6- ON-STATE CURRENT VERSUS ON-STATE VOLTAGE(TYPICAL VALUES).