TAYCHIPST TELECOMMUNICATION PROTECTION

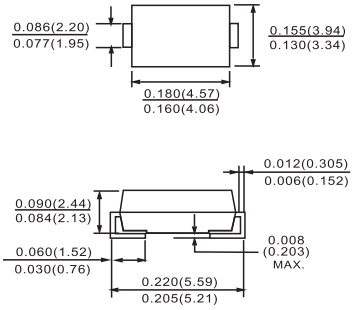
SMTPB62 THRU SMTPB270

62V-270V 5.0W

FEATURES

- Bidirectional crowbar protection
- Voltage range:from 62V to 270V.
- Holding current:I_H=150mA min
- Repetitive peak pulse
- current:I_{PP}=100A,10/1000μs.

DO-214AA(SMB)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

ABSOLUTE MAXIMUM RATINGS (T_A=25℃)

Symbol	Parameter		Value	Unit
P	Power dissipation on infinite heatsink	T_{amb}=50℃	5.0	W
Ipp	Peak pulse current	10/1000 μ s 8/20 μ s 2/10 μ s	100 150 500	A
I_{TSM}	Non repetitive surge peak on-state current	tp=20ms	50	A
I^2t	I^2t vallue for fusing	tp=20ms	25	A^2s
dV/dt	Critical rate of rise of off-state voltage	V_{RM}	5	kV/μS
T_{stg} T_j	Storage temperature range Maximum junction temperature		-55to+150 150	℃
T_L	Maximum lead temperature for soldering during 10s at 5mm form case		230	℃

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit
R_{th}(j-l)	Junction to leads (L_{lead}=10mm)	20	℃/W
R_{th}(j-a)	Junction to ambient on printed circuit (L_{lead}=10mm)	75	℃/W

Type	I_{RM} @ V_{RM} max.		V_R @ I_R min. note1		V_{BO} @ I_{BO} max. note2		I_H min. note3	C max. note4
	μA	V	V	μA	V	mA	mA	pF
SMTPB62	2	56	62	50	82	800	150	300
SMTPB68	2	61	68	50	90	800	150	300
SMTPB100	2	90	100	50	133	800	150	200
SMTPB120	2	108	120	50	160	800	150	200
SMTPB130	2	117	130	50	173	800	150	200
SMTPB180	2	162	180	50	240	800	150	200
SMTPB200	2	180	200	50	267	800	150	200
SMTPB220	2	198	220	50	293	800	150	200
SMTPB240	2	216	240	50	320	800	150	200
SMTPB270	2	243	270	50	360	800	150	200

FIG.1 -- NON REPETITIVE SURGE PEAK ON-STATE CURRENT VERSUS OVERLOAD DURATION (T_J INItIAL=25°C).

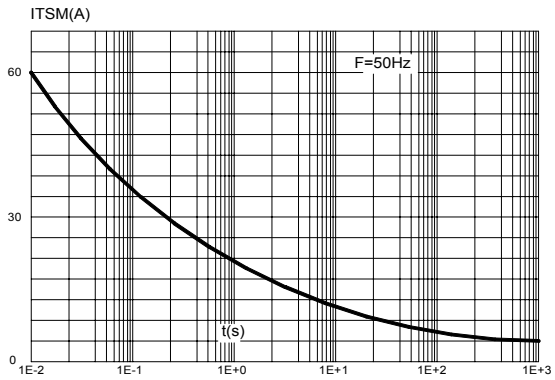


FIG.2 -- RELATIVE VARIATION OF HOLDING CURRENT VERSUS JUNCTION TEMPERATURE.

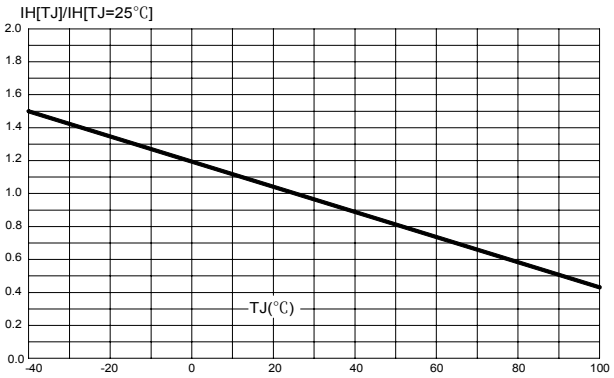


FIG.3 -- RELATIVE VARIATION OF JUNCTION CAPACITANCE VERSUS REVERSE APPLIED VOLTAGE

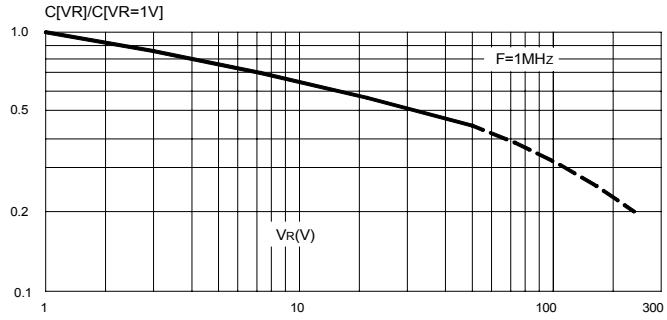


FIG.4 -- ON-STATE CURRENT VERSUS ON-STATE VOLTAGE

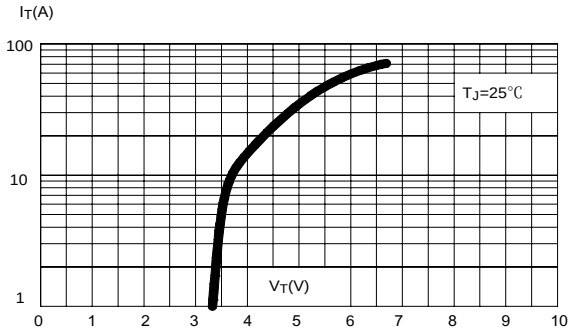


FIG.5 -- TRANSIENT THERMAL IMPEDANCE JUNCTION TO AMBIENT VERSUS PULSE DURATION

