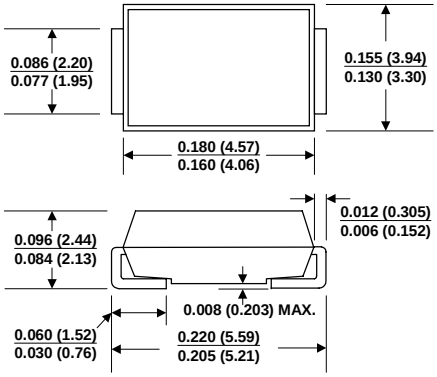
LOW CAPACITANCE THYRISTOR SERIES
CAPACITANCE THYRISTOR SERIES

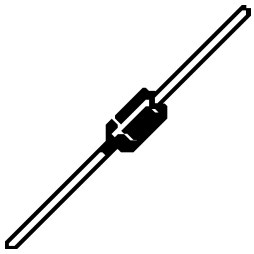
DESCRIPTION

DO-214AA
(SMB)

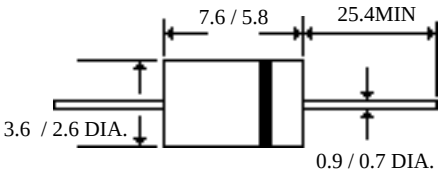
MECHANICAL DIMENSION



Dimensions in inches and(millimeters)



DO-15



◎ UL94V-0 Flammability Classification
◎ ESD Protection >40 kilovolts
◎ Low Capacitance for T1/E1 Trunk and Line Card Application
◎ High Surge Current Capability
◎ Peak Off-State Voltage from 58 to 160 volts
◎ Meet IEC61000-4-4 & -5 Industry Requirement
◎ Provides Protection in Accordance with FCC Part 68 ,UL1459,Bellcore 1089,ITU-TK. 20 & K. 21

FEATURES

- ☐ UL94V-0 Flammability Classification
- ☐ ESD Protection >40k Voltage
- ☐ ,High Surge Current Capability
- ☐ Peak Off-State voltage from 58~300V
- ☐ Meet IEC100-4-4 & -5 Industry requirement
- ☐ Low Capacitance for T1/E1 Trunk and Line Card Application
- ☐ Provides Protection in Accordance with FCC part 68, UL1459, Bellcore 1089, ITU-TK. 20& K.21

Thyristor Diodes

FCI Part #	VDRM V	Vs V	IHO mA	Is mA	IT A	Ipp A	Cj @ 2V pF	CODE	Package
TSP064ALL	58	77	150	800	1	50	60	T064ALL	DO-15
TSP072ALL	65	88					60	T072ALL	
TSP080ALL	75	98					60	T080ALL	
TSP110ALL	90	130					60	T110ALL	
TSP130ALL	120	160					40	T130ALL	
TSP150ALL	140	180					40	T150ALL	
TSP180ALL	160	220					40	T180ALL	
TSP230ALL	190	260					30	T230ALL	
TSP260ALL	220	300					30	T260ALL	
TSP310ALL	275	350					30	T310ALL	
TSP064BLL	58	77	150	800	1	75	60	T064BLL	DO-15
TSP072BLL	65	88					60	T072BLL	
TSP080BLL	75	98					60	T080BLL	
TSP110BLL	90	130					60	T110BLL	
TSP130BLL	120	160					60	T130BLL	
TSP150BLL	140	180					40	T150BLL	
TSP180BLL	160	220					40	T180BLL	
TSP230BLL	190	260					30	T230BLL	
TSP260BLL	220	300					30	T260BLL	
TSP310BLL	275	350					30	T310BLL	
TSP064CLL	58	77	150	800	1	100	90	T064CLL	DO-15
TSP072CLL	65	88					90	T072CLL	
TSP080CLL	75	98					90	T080CLL	
TSP110CLL	90	130					90	T110CLL	
TSP130CLL	120	160					70	T130CLL	
TSP150CLL	140	180					70	T150CLL	
TSP180CLL	160	220					70	T180CLL	
TSP230CLL	190	260					60	T230CLL	
TSP260CLL	220	300					60	T260CLL	
TSP310CLL	275	350					60	T310CLL	
TSP064AL	58	77	150	800	1	50	60	GCL	SMB
TSP072AL	65	88					60	GDL	
TSP080AL	75	98					60	GEL	
TSP110AL	90	130					60	GFL	
TSP130AL	120	160					40	GGL	
TSP150AL	140	180					40	GHL	
TSP180AL	160	220					40	GIL	
TSP230AL	190	260					30	GJL	
TSP260AL	220	300					30	GKL	
TSP310AL	275	350					30	GLL	
TSP064BL	58	77	150	800	1	75	60	GPL	SMB
TSP072BL	65	88					60	GQL	
TSP080BL	75	98					60	GRL	
TSP110BL	90	130					60	GSL	
TSP130BL	120	160					60	GTL	
TSP150BL	140	180					40	GUL	
TSP180BL	160	220					40	GVL	
TSP230BL	190	260					30	GWL	
TSP260BL	220	300					30	GXL	
TSP310BL	275	350					30	GYL	
TSP064CL	58	77	150	800	1	100	90	HCL	SMB
TSP072CL	65	88					90	HDL	
TSP080CL	75	98					90	HEL	
TSP110CL	90	130					90	HFL	
TSP130CL	120	160					70	HGL	
TSP150CL	140	180					70	HHL	
TSP180CL	160	220					70	HIL	
TSP230CL	190	260					60	HJL	
TSP260CL	220	300					60	HKL	
TSP310CL	275	350					60	HLL	

Max On-state Current @ Vdrm: 5uA

Max Off-state Current @ It: 5V

Thyristor Diodes

FCI Part #	VDRM V	Vs V	IHO mA	Is mA	IT A	Ipp A	Cj @ 2V pF	CODE	Package
TSP110AL	90	130					100	T110AL	
TSP130AL	120	160					80	T130AL	
TSP150AL	140	180					70	T150AL	
TSP180AL	160	220					70	T180AL	
TSP230AL	190	260	150	800	1	50	50	T230AL	DO-15
TSP260AL	220	300					50	T260AL	
TSP310AL	275	350					40	T310AL	
TSP350AL	300	400					40	T350AL	
TSP400AL	360	450					40	T400AL	
TSP110BL	90	130					130	T110BL	
TSP130BL	120	160					120	T130BL	
TSP150BL	140	180					120	T150BL	
TSP180BL	160	220					100	T180BL	
TSP230BL	190	260	150	800	1	75	80	T230BL	DO-15
TSP260BL	220	300					80	T260BL	
TSP310BL	275	350					60	T310BL	
TSP350BL	300	400					60	T350BL	
TSP400BL	360	450					60	T400BL	
TSP110CL	90	130					150	T110CL	
TSP130CL	120	160					140	T130CL	
TSP150CL	140	180					140	T150CL	
TSP180CL	160	220					125	T180CL	
TSP230CL	190	260	150	800	1	100	100	T230CL	DO-15
TSP260CL	220	300					100	T260CL	
TSP310CL	275	350					80	T310CL	
TSP350CL	300	400					80	T350CL	
TSP400CL	360	450					80	T400CL	
TSP110A	90	130					100	GF	
TSP130A	120	160					80	GG	
TSP150A	140	180					70	GH	
TSP180A	160	220					70	GI	
TSP230A	190	260	150	800	1	50	50	GJ	SMB
TSP260A	220	300					50	GK	
TSP310A	275	350					40	GL	
TSP350A	300	400					40	GM	
TSP400A	360	450					40	GO	
TSP110B	90	130					130	GS	
TSP130B	120	160					120	GT	
TSP150B	140	180					120	GU	
TSP180B	160	220					100	GV	
TSP230B	190	260	150	800	1	75	80	GW	SMB
TSP260B	220	300					80	GX	
TSP310B	275	350					60	GY	
TSP350B	300	400					60	GZ	
TSP400B	360	450					60	GN	
TSP110C	90	130					150	HF	
TSP130C	120	160					140	HG	
TSP150C	140	180					140	HH	
TSP180C	160	220					125	HI	
TSP230C	190	260	150	800	1	100	100	HJ	SMB
TSP260C	220	300					100	HK	
TSP310C	275	350					80	HL	
TSP350C	300	400					80	HM	
TSP400C	360	450					80	HS	

Max On-state Current @ Vdrm: 5uA

Max Off-state Current @ It: 5V

Fig.1 Pulse Wave Form Example

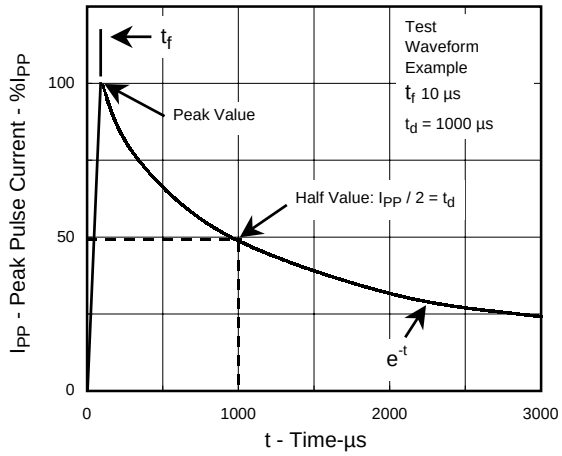


Fig.2 Typical Peak Off-State Current Vs Junction Temperature

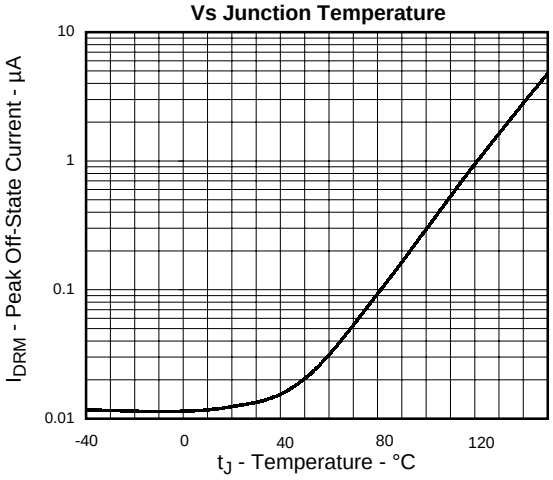


Fig.3 Typical On-State Current Vs On-State Voltage

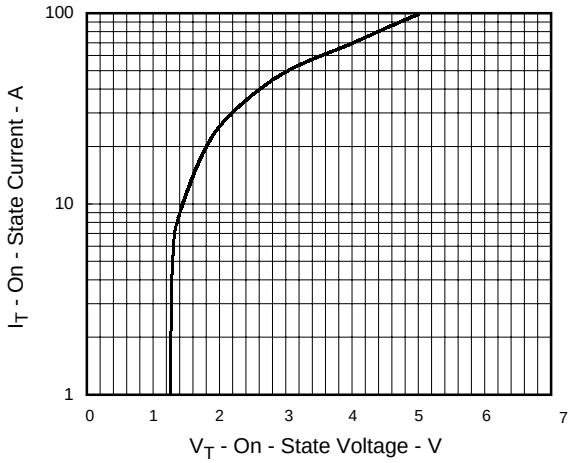


Fig.4 Typical Holding Current Vs Junction Temperature

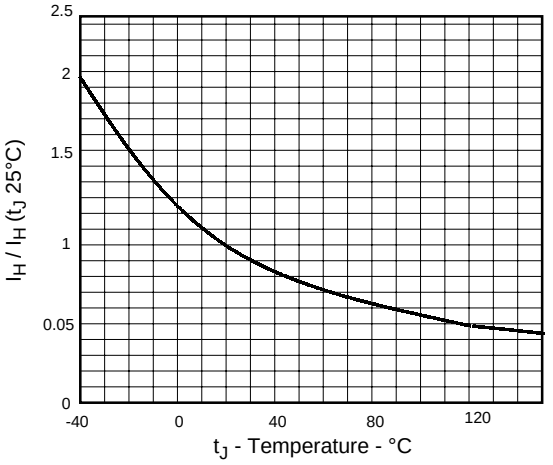


Fig.5 Typical normalized V_S Vs Junction Temperature

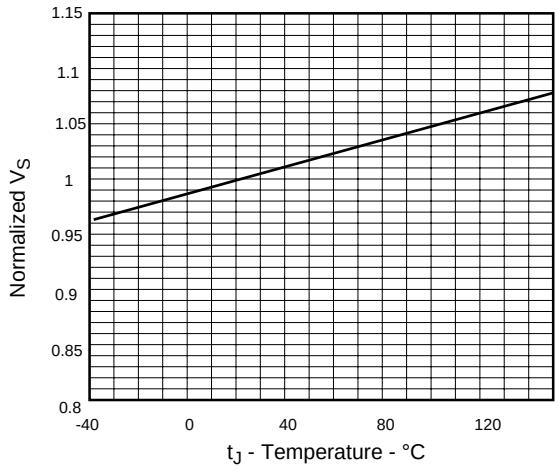


Fig.6 On-State Current Vs Surge Current Duration

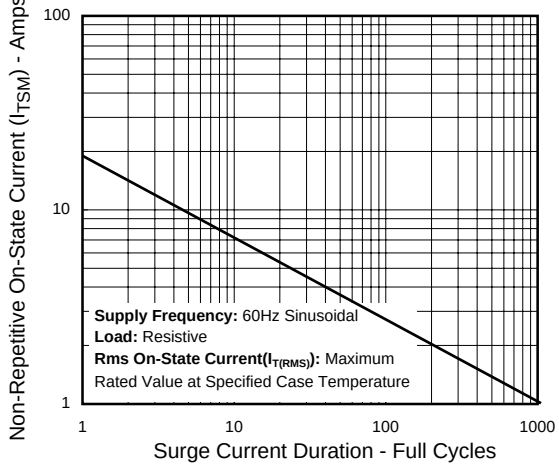
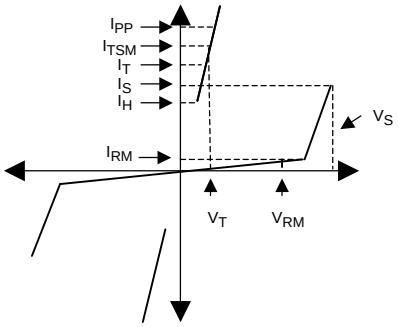



Fig.7 V - I Characteristics Curve