

BOURNS Thyristor Surge Protectors

BOURNS®

BOURNS TISP THYRISTOR OVERVOLTAGE PROTECTORS

Continuing to provide the most complete solutions to your circuit protection needs, Bourns recently introduced the TISP® line of products. The TISP® products are specially designed to provide protection for telecommunications equipment in instances where high voltages occur as a result of lightning strikes, power line crosses or a/c power surges. Coupled with Bourns' Multifuse® PPTC overcurrent protectors and Bourns, Line Protection Networks, the TISP® products offer telecom customers a more comprehensive total protection product line.

Bidirectional Thyristor Surge Protector

This TISP® device series protects central office, access and customer premise equipment against overvoltages on the telecom line. These devices are housed in a through-hole DO-92 package (TO-92 package with cropped center leg).

For quantities greater than listed, call for quote.

MOUSER STOCK NO.		Fig.	V _{DRM} (V) Standoff Voltage	V _(BO) (V) Protect. Voltage	Delta Capacitance	Ratings for Lighting Surge Standards		Price Each			
Mfr.	Mfr. Part No.					IEC 61000-4-5 8/20 μs(A)	GR-1089-CORE 10/1000 μs(A)	1	50	100	500
652	TISP4P015L1NR-S	A	8	15	2	30	18	.46	.36	.34	.30
652	TISP4P020L1NR-S	A	12	20	3	30	18	.46	.36	.34	.30
652	TISP4P025L1NR-S	A	16	25	3	30	18	.46	.36	.34	.30
652	TISP4P035L1NR-S	A	24	35	2	30	18	.46	.36	.34	.30

SMALL-OUTLINE PACKAGES

Quad-Forward-Conducting Buffered P-Gate Thyristor

Independent Overvoltage Protection for Two SLICs in Short Loop Applications:

- Wide 0V to -90V Programming Range
- Low 5mA max. Gate Triggering Current
- High 150mA min. (85°C) Holding Current
- Specified 1.2/50 and 0.5/700 Limiting Voltage
- Full -40°C to 85°C Temperature Range

NEW PRODUCT

For quantities greater than listed, call for quote.

MOUSER STOCK NO.		Fig.	V _(BO) (V) Protect. Voltage	I _{PPSM} Ratings for Lighting Surge Standards				Price Each			
Mfr.	Mfr. Part No.			GR-1089-CORE 2/10 μs (A)	ANSI C62.41 8/20 μs (A)	ITU-T K.20/21 5/310 μs (A)	GR-1089-CORE 10/1000 μs (A)	1	50	100	500
652	TISP61089DR-S	B	0 to -75	120	No Value	40	30	1.55	.86	.74	.65
652	TISP61089QDR-S	B	0 to -64	120	No Value	40	30	.89	.84	.80	.74
652	TISP6NT2PCDR-S	B	0 to -150	90	No Value	40	25	2.04	1.22	1.03	.90
652	TISP8200MDR-S	B	0 to -90	210	No Value	70	45	1.44	1.15	1.05	.88
652	TISP8201MDR-S	B	0 to +90	210	No Value	70	45	1.44	1.15	1.05	.88

Dual Forward-Conducting P-Gate and N-Gate Thyristor Programmable Overvoltage Protectors

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MOUSER STOCK NO.		Fig.	V _(BO) (V) Protect. Voltage	I _{PPSM} Ratings for Lighting Surge Standards				Price Each			
Mfr.	Mfr. Part No.			GR-1089-CORE 2/10 μs (A)	ANSI C62.41 8/20 μs (A)	ITU-T K.20/21 5/310 μs (A)	GR-1089-CORE 10/1000 μs (A)	1	50	100	500
652	TISP61089ADR-S	B	0 to -120	120	---	40	30	1.55	.86	.74	.65
652	TISP61089BDR-S	B	0 to -170	120	---	40	30	1.55	.86	.74	.65
652	TISP61089HDMR-S	B	0 to -170	---	150	100	---	3.45	2.07	1.87	1.66
652	TISP61089QBDR-S	B	-20 to -155	120	---	40	30	1.55	.85	.73	.65
652	TISP8200HDMR-S	B	0 to -70	500	---	150	100	4.60	4.03	3.74	3.45
652	TISP8201HDMR-S	B	0 to 70	500	---	150	100	4.60	4.03	3.74	3.45

SURFACE MOUNT PACKAGES

Very Low Voltage Bidirectional Thyristor Overvoltage Protectors

For quantities greater than listed, call for quote.

MOUSER STOCK NO.		Fig.	V _{DRM} (V) Standoff Voltage	V _(BO) (V) Protect. Voltage	I _H (mA) Holding Current	I _{PPSM} Ratings for Lighting Surge Standards				Price Each			
Mfr.	Mfr. Part No.					GR-1089-CORE 2/10 μs (A)	TIA/EIA-IS-968 10/560 μs (A)	ITU-T K.20/21 5/310 μs (A)	GR-1089-CORE 10/1000 μs (A)	1	50	100	500
652	TISP4015H1BJR-S	C1	8	15	50	500	125	150	100	.46	.36	.34	.30
652	TISP4040H1BJR-S	C1	25	40	50	500	125	150	100	.46	.36	.34	.30

Forward-Conducting Unidirectional Thyristor Overvoltage Protectors

For quantities greater than listed, call for quote.

MOUSER STOCK NO.		Fig.	V _{DRM} (V) Standoff Voltage	V _(BO) (V) Protect. Voltage	I _{PPSM} Ratings for Lighting Surge Standards				Price Each				
Mfr.	Mfr. Part No.				GR-1089-CORE 2/10 μs (A)	ANSI C62.41 8/20 μs (A)	TIA/EIA-IS-968 10/560 μs (A)	ITU-T K.20/21 5/310 μs (A)	GR-1089-CORE 10/1000 μs (A)	1	50	100	500
652	TISP5070H3BJR-S	C2	-58	-70	500	300	160	200	100	.58	.45	.43	.39
652	TISP5080H3BJR-S	C2	-65	-80	500	300	160	200	100	.58	.45	.43	.39

Bidirectional Thyristor Overvoltage Protectors

NEW PRODUCT

For quantities greater than listed, call for quote.

MOUSER STOCK NO.		Fig.	V _{DRM} (V) Standoff Voltage	V _(BO) (V) Protect. Voltage	I _H (mA) Holding Current	I _{PPSM} Ratings for Lighting Surge Standards				Price Each			
Mfr.	Mfr. Part No.					GR-1089-CORE 2/10 μs (A)	TIA/EIA-IS-968 10/560 μs (A)	ITU-T K.20/21 5/310 μs (A)	GR-1089-CORE 10/1000 μs (A)	1	50	100	500
652	TISP4125H3BJR-S	C1	100	125	150	500	160	200	100	.58	.45	.43	.39
652	TISP4145M3BJR-S	C1	120	145	150	300	100	100	50	.66	.50	.44	.37
652	TISP4C115H3BJR-S	C1	90	115	150	500	100	150	100	.98	.50	.44	.37
652	TISP4C290H3BJR-S	C1	220	150	150	500	100	150	100	.98	.50	.44	.37
652	TISP4C350H3BJR-S	C1	275	150	150	500	100	150	100	.98	.50	.44	.37
652	TISP4S040L1BJR-S	C1	25	40	50	---	---	---	30	.68	.60	.54	.50
652	TISP4S040M1BJR-S	C1	25	40	40	---	---	---	50	.90	.80	.72	.66
652	TISP4S077M3BJR-S	C1	58	77	150	---	---	---	50	.90	.80	.72	.66
652	TISP4S088M3BJR-S	C1	65	88	150	---	---	---	50	.90	.80	.72	.66
652	TISP4S098M3BJR-S	C1	75	98	150	---	---	---	50	.90	.80	.72	.66
652	TISP4S160M3BJR-S	C1	120	160	150	---	---	---	50	.90	.80	.72	.66
652	TISP4S180M3BJR-S	C1	140	180	150	---	---	---	50	.90	.80	.72	.66
652	TISP4S240M3BJR-S	C1	180	240	150	---	---	---	50	.90	.80	.72	.66
652	TISP4S260M3BJR-S	C1	190	260	150	---	---	---	50	.90	.80	.72	.66
652	TISP4S300M3BJR-S	C1	220	300	150	---	---	---	50	.90	.80	.72	.66
652	TISP4S350M3BJR-S	C1	275	350	150	---	---	---	50	.90	.80	.72	.66
652	TISP4S350T3BJR-S	C1	275	350	150	---	---	---	80	.81	.72	.65	.59
652	TISP4S400M3BJR-S	C1	300	400	150	---	---	---	50	.90	.80	.72	.66

