

# STMICROELECTRONICS Surge Protection Devices

life.augmented

Products may be RoHS compliant. Check mouser.com for RoHS status.

## LOW-CAPACITANCE TRANSIENT-SURGE ARRESTORS

The ETP01 series is a low-capacitance TRISIL transient-surge arrester designed to protect high data-rate communication networks. The planar technology used combines a high surge capability to comply with Telcordia GR-1089 intrabuilding and ITU-T K20/21 standards, and low capacitance to avoid distortion of high-speed signals such as with Ethernet.

Surface Mount Devices

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	STM Part No.	Package	I <sub>TMS</sub>	I <sub>RM</sub> @V <sub>RM</sub>		V <sub>BO</sub> (Max)	Operating Temperature	Price Each			
				(Min.)	(Max.)			1	10	100	250
511-ETP01-1621RRL	ETP01-1621RRL	SO-8	8A	3.3V	16V	25V	-40 to +150	2.13	1.79	1.51	1.36
511-ETP01-2821RRL	ETP01-2821RRL	SO-8	8A	3.3V	28V	36V	-40 to +150	2.25	1.86	1.56	1.40

## ESD SUPPRESSORS



RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	STM Part No.	Package	ESD Capability	Breakdown Volt. (Min./Typ./Max.)	Capacitance Volt. (Typ./Max.)	Reverse Current (IR)(Min.)/(mA)	Lines Protected	Price Each			
								1	10	100	250
511-ESDA12-1K	ESDA12-1K	SOD-523	30kV	12.0/13.0/----	-----/150	1.0	1	.45	.37	.28	.25
511-ESDA14V2BP6	ESDA14V2BP6	SOT-666	8kV-15kV	14.2/-----/18.0	25/-----	1.0	5	.50	.481	.33	.29
511-ESDA14V2L	ESDA14V2L	SOT-23-3	8kV-15kV	14.2/-----/15.8	90/-----	1.0	2	.52	.47	.36	.31
511-ESDA14V2-1BF3	ESDA14V2-1BF3	FlipChip-2	8kV-15kV	14.2/-----/18.0	-----	1.0	1	.40	.33	.25	.18
511-ESDA14V2SC6	ESDA14V2SC6	SOT-23-6L	8kV-15kV	14.2/-----/15.8	100/-----	1.0	4	.63	.55	.41	.36
511-ESDA18-1K	ESDA18-1K	SOD-523	30kV	18.0/19.0/----	-----/105	1.0	1	.45	.37	.28	.25
511-ESDA25B1-TR	ESDA25B1RRL	SO-8	8kV-15kV	25.0/-----/30.0	15/-----	1.0	6	.86	.66	.57	.54
511-ESDA25L	ESDA25L	SOT-23-3	8kV-15kV	25.0/-----/30.0	50/-----	1.0	2	.30	.261	.21	.20
511-ESDA25SC6	ESDA25SC6	SOT-23-6L	8kV-25kV	25.0/-----/30.0	80/-----	1.0	4	1.19	.66	.57	.54
511-ESDA5V3L	ESDA5V3L	SOT-23-3	8kV-15kV	5.3/-----/5.9	220/-----	1.0	2	.50	.41	.32	.29
511-ESDA5V3SC6	ESDA5V3SC6	SOT-23-6L	8kV-25kV	5.3/-----/5.9	280/-----	1.0	4	.48	.45	.40	.33
511-ESDA6V1-4BC6	ESDA6V1-4BC6	SOT-23-6L	8kV-15kV	6.1/-----/8.0	45/-----	1.0	4	.45	.34	.29	.26
511-ESDA6V1-5SC6	ESDA6V1-5SC6	SOT-23-6L	8kV-15kV	6.1/-----/7.2	50/-----	1.0	5	.96	.79	.62	.54
511-ESDA6V1-5W6	ESDA6V1-5W6	SOT-323-6L	8kV-25kV	6.1/-----/7.2	50/-----	1.0	5	1.04	.90	.72	.61
511-ESDA6V1BC6	ESDA6V1BC6	SOT-23-6L	8kV-15kV	6.1/-----/8.0	20/-----	1.0	4	.53	.47	.41	.39
511-ESDA6V1L	ESDA6V1L	SOT-23-3	8kV-15kV	6.1/-----/7.2	50/-----	1.0	2	.36	.31	.24	.22
511-ESDA6V1SC6	ESDA6V1SC6	SOT-23-6L	8kV-15kV	6.1/-----/7.2	190/-----	1.0	4	.52	.46	.40	.35
511-ESDA6V1U1	ESDA6V1U1	SO-8	8kV-15kV	6.1/-----/7.2	100/-----	1.0	6	1.05	.92	.78	.67
511-ESDA6V1U1-TR	ESDA6V1U1RRL	SO-8	8kV-15kV	6.1/-----/7.2	100/-----	1.0	6	.98	.76	.55	.50
511-ESDA6V1W5	ESDA6V1W5	SOT-323-5L	8kV-25kV	25.0/-----/30.0	30/-----	1.0	5	.50	.41	.32	.29
511-ESDA8V2-1J	ESDA8V2-1J	SOT-323	8kV-15kV	8.2/-----/-----	210/250	1.0	1	.61	.54	.47	.45
511-ESDALC5-1BM2	ESDALC5-1BM2	SOD-882	8kV-15kV	11/13/-----	-----	0.05	1	.25	.24	.22	.20
511-ESDALC6V1-1M2	ESDALC6V1-1M2	SOD-882	8kV-15kV	6.1/-----/7.2	22/-----	1.0	1	1.18	.16	1.139	1.121
511-ESDALC6V1P5	ESDALC6V1P5	SOT-665	8kV-15kV	6.1/-----/7.2	7.5/-----	1.0	4	.48	.45	.40	.33
511-ESDALC6V1P6	ESDALC6V1P6	SOT-666IP	8kV-15kV	6.1/-----/7.2	7.5/-----	1.0	4	.52	.46	.40	.35
511-ESDALC6V1W5	ESDALC6V1W5	SOT-323-5L	8kV-25kV	6.1/-----/7.2	7.5/-----	1.0	4	.50	.41	.32	.29
511-ESDALC6V1-5P6	ESDALC6V1-5P6	SOT-666	8kV-15kV	6.1/-----/7.2	12/15	1.0	5	.60	.51	.43	.37
511-ESDAULC6-3BP6	ESDAULC6-3BP6	SOT-666	8kV-15kV	6.0/-----/9.2	1.0/1.25	1.0	3	.67	.60	.51	.49
511-ESDAULC6-8F3	ESDAULC6-8F3	FlipChip-9	8kV-15kV	6.0/-----/10.0	-----/1.2	1.0	8	1.86	1.68	1.25	1.14
511-ESDAVLC6-1BF4	ESDAVLC6-1BF4	FlipChip-0201	8kV-15kV	6/-----/10	4/7	-----	1	.30	.27	.25	.21
511-ESDAVLC8-1BM2	ESDAVLC8-1BM2	SOD-882	8kV-15kV	14.5/17.0/-----	-----	0.05	1	.48	.45	.40	.33
511-ESDLIN1524BJ	ESDLIN1524BJ	SOD-323	10kV-23kV	25.4/27.8/30.3	16/20	5.0	1	.77	.69	.59	.57
511-USB6B1	USB6B1	SO-8	8kV-15kV	6.0/-----/-----	15/-----	1.0	2	.69	.63	.59	.57
511-USB6B1RL	USB6B1RL	SO-8	8kV-15kV	6.0/-----/-----	15/-----	1.0	2	.91	.80	.70	.66
511-USBDF01W5	USBDF01W5	SOT-323-5L	8kV-15kV	6.0/-----/-----	-----	1.0	2	.72	.64	.52	.45
511-USBLC6-2P6	USBLC6-2P6	SOT-666	8kV-15kV	6.0/-----/-----	1.2/1.7	1.0	2	.67	.59	.51	.49
511-USBLC6-2SC6	USBLC6-2SC6	SOT-23-6L	8kV-15kV	6.0/-----/-----	1.2/1.7	1.0	2	.67	.59	.51	.49
511-USBLC6-4SC6	USBLC6-4SC6	SOT-23-6L	8kV-15kV	6.0/-----/-----	1.85/2.7	1.0	4	1.10	.95	.82	.78
511-USBUF01P6	USBUF01P6	SOT-666IP	8kV-15kV	6.0/-----/10.0	47/-----	1.0	2	.75	.68	.56	.49
511-USBUF01W6	USBUF01W6	SOT-323-6L	8kV-15kV	6.0/-----/10.0	47/-----	1.0	1	1.01	.90	.78	.70
511-USBUF02W6	USBUF02W6	SOT-323-6L	8kV-15kV	6.0/-----/10.0	47/-----	1.0	1	.82	.76	.70	.61
511-USBULC6-2M6	USBULC6-2M6	μQFN-6L	8kV-15kV	6.0/-----/-----	0.65/0.85	1.0	2	.91	.80	.70	.66
511-USBULC6-3F3	USBULC6-3F3	FlipChip-4	8kV	6.0/-----/-----	-----/3.0	1.0	3	1.02	.89	.74	.63

## ESD PROTECTION FOR INTERNAL DISPLAYPORT™



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	STM Part No.	Package	ESD Capability	Breakdown Volt. (Min./Typ./Max.)	ΔCI/O-GND (Typ./Max.)(pF)	Leakage Current (IR) (Min.)/(mA)	Operating Temperature (°C)	Price Each			
								1	10	100	250
511-DPIULC6-6DJL	DPIULC6-6DJL	DFN-18	8kV-15kV	6.0/-----/-----	0.05/0.12	100	-40 to +125	1.61	1.37	1.18	1.06

## ESD PROTECTION IC FOR RINGING SLICs

The LCP12 has been developed to protect SLICs operating on both negative and positive battery supplies, as well as high voltage SLICs. It provides crowbar mode protection for both TIP and RING lines.

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	STM Part No.	Package	Firing Voltage Range (V)	Peak Pulse Current (A) 10/1000μs	Gate Triggering Current (mA)	Holding Current (Min.) (mA)	Price Each			
							1	10	100	250
511-LCP12-150B1RL	LCP12-150B1RL	SO-8	-120 to +120	45	5	150	2.73	2.46	1.98	1.76
511-LCP1521SRL	LCP1521SRL	SO-8	-175	30	2.5	150	.78	.66	.57	.54

## ESD PROTECTION AND SIGNAL BOOSTER FOR HDMI INTERFACES



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	STM Part No.	Package	Pkg Size (mm)	ESD Capability	Overcurrent Protection (V)	Pitch	Operating Temperature (°C)	Price Each			
								1	10	100	250
511-HDMI2C1-5DJJ	HDMI2C1-5DJJ	QFN-16	5 x 4	8kV	5	500μm	-40 to +85	2.28	1.95	1.59	1.43

## ESD PROTECTION AND CONTROL-LINE TERMINATION FOR HDMI INTERFACES

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	STM Part No.	Package	Breakdown Voltage	Capacitance	Peak Pulse Current	Lines Protected	Price Each			
							1	10	100	250
511-HDMIULC6-2P6	HDMIULC6-2P6	SOT-666	6V	0.5pF	15kV	2	1.04	.92	.737	.641
511-HDMIULC6-4SC6	HDMIULC6-4SC6	SOT-23	6V	0.5pF	15kV	4	1.20	1.05	.90	.87

## ULTRA LOW CAPACITANCE ESD PROTECTION



For quantities greater than listed, call for quote.

MOUSER STOCK NO.	STM Part No.	Package	Channel Lines	V <sub>CL</sub> @ I <sub>PP</sub> 1A (Max.)(V)	V <sub>BR</sub>		I <sub>RM</sub> @ V <sub>RM</sub> (μA)(Max.)	Max. Junction Temp.	Capacitance (Max.)(pF)	Price Each			
					(V)(Min.)	@ I <sub>R</sub> (mA)				(V)(Max.)	(V)(Max.)	1	10
511-DVIULC6-2M6	DVIULC6-2M6	μQFN-6	2	12	6	1	0.5	5	0.6	1.24	1.10	.91	.79
511-DVIULC6-4SC6	DVIULC6-4SC6	SOT-23-6L	4	12	6	1	0.5	5	0.6	1.24	1.09	.93	.88
511-ESDALC6V1-1BU2	ESDALC6V1-1BU2	ST-0201	5	----	6.1	1	0.1	3	5.0	.61	.52	.389	.338
511-ESDARF03-1BF3	ESDARF03-1BF3	FlipChip-4	1	----	6	1	0.1	3	0.6	.57	.50	.40	.35