

ESD Protection Arrays, ESD Protectors & EMI Filters california micro devices

Transient Protection
CMD (California Micro Devices)

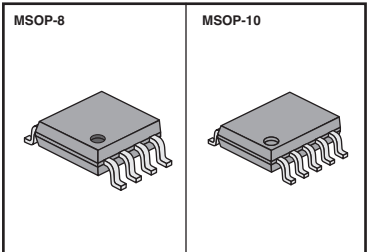
CMD LOW CAPACITANCE ESD PROTECTION ARRAYS

CM1213 Series

- 1, 2, 4, 6 and 8 channels of ESD protection
- Low channel input capacitance of 1.0pF typical
- Minimal capacitance change with temperature and voltage
- Channel input capacitance matching of 0.02pF typical
- is ideal for differential signals
- Mutual capacitance between signal pin and adjacent signal pin - 0.11pF typical
- Zener diode protects supply rail and eliminates the need for external by-pass capacitors
- Each I/O pin can withstand over 1000 ESD strikes
- Storage Temperature Range -65 to +150°C
- Operating Temperature Range -40 to +85°C

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	CMD Part Number	Package	ESD Protection (IEC)	Channels	Price Each			
					1	10	50	100
748-CM1213A-01SO	CM1213A-01SO	SOT23-3	±15kV	1	.45	.38	.33	.30
748-CM1213A-02SR	CM1213A-02SR	SOT143	±15kV	2	.48	.40	.32	.30
748-CM1213A-02SO	CM1213A-02SO	SOT23-5	±15kV	2	.48	.40	.32	.30
748-CM1213A-04MR	CM1213-04MR	MSOP-10	±15kV	4	.66	.61	.55	.50
748-CM1213A-04SO	CM1213-04SO	SOT23-6	±15kV	4	.54	.50	.45	.41
748-CM1213-06MR	CM1213-06MR	MSOP-8	±15kV	6	.69	.63	.58	.52
748-CM1213-06SM	CM1213-06SM	SOIC-8	±15kV	6	.66	.61	.55	.50
748-CM1213-08MR	CM1213-08MR	MSOP-10	±15kV	8	.78	.72	.65	.59

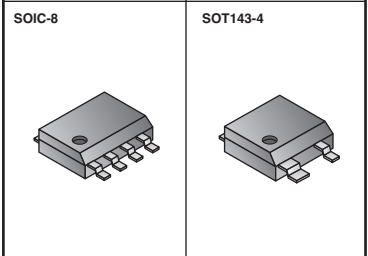


CM1213 Series

- 2, 4, and 8 channels of ESD protection
- Low loading capacitance of 2.0pF max.
- Low clamping voltage
- Channel I/O to I/O capacitance 1.5pF typical
- Zener diode protects supply rail and eliminates the need for external by-pass capacitors
- Each I/O pin can withstand over 1000 ESD strikes

For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.	CMD Part Number	Package	ESD Protection (IEC)	Channels	Price Each			
					1	50	100	500
748-CM1293-02SR	CM1293-02SR	SOT143-4	±15kV	2	.48	.44	.40	.36
748-CM1293-02SO	CM1293-02SO	SOT23-5	±15kV	2	.48	.44	.40	.36
748-CM1293-04SO	CM1293-04SO	SOT23-6	±15kV	4	.51	.47	.43	.38



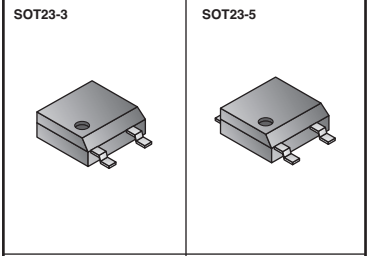
CMD TRANSIENT VOLTAGE SUPPRESSORS/ESD PROTECTORS:

CM1218, CM1219 SERIES

- Low I/O capacitance at 4pF typical (CM1219)
- Low I/O capacitance at 7pF typical (CM1218)
- Two, three, four or five channels of ESD protection
- Each I/O pin can withstand over 1000 ESD strikes
- In-system ESD protection to ±8kV contact discharge, per the IEC 61000-4-2 international standard
- Compact SMT package saves board space and facilitates layout in space-critical applications
- Storage Temperature Range -65 to +150°C
- Operating Temperature Range -40 to +85°C

For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.	CMD Part Number	Package	ESD Protection (IEC)	Channels	Price Each			
					1	50	100	500
748-CM1219-02SO	CM1219-02SO	SOT23-3	±8kV	2	.27	.25	.23	.20
748-CM1219-02S7	CM1219-02S7	SC70-3	±8kV	2	.27	.25	.23	.20
748-CM1218-02SO	CM1218-02SO	SOT23-3	±15kV	2	.27	.25	.23	.20
748-CM1218-04SE	CM1218-04SE	SOT-553-5	±15kV	4	.24	.16	.15	.14
748-CM1218-04SO	CM1218-04SO	SOT23-5	±15kV	4	.36	.33	.30	.27
748-CM1218-05SE	CM1218-05SE	SOT-563-6	±15kV	5	.27	.18	.17	.16

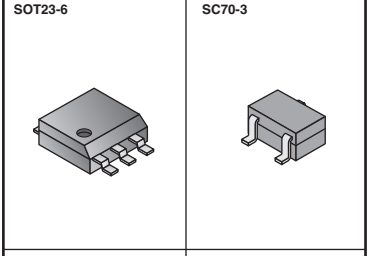


CMD TRANSIENT VOLTAGE SUPPRESSORS / ESD PROTECTORS

- Two, three, four, five, or six transient voltage suppressors (CM1248)
- In-system ESD protection to ±20kV contact discharge, per the IEC 61000-4-2 international standard
- Compact SMT package saves board space and facilitates layout in space-critical applications
- Low I/O capacitance at 10pF at 0V
- Each I/O pin can withstand over 1000 ESD strikes
- Storage Temperature Range -65 to +150°C
- Operating Temperature Range -40 to +85°C

For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.	CMD Part Number	Package	ESD Protection (IEC)	Channels	Price Each			
					1	50	100	500
CM1248 Series								
748-CM1248-08DE	CM1248-08DE	uDFN-8 + DAP	±20kV	- - -	.30	.25	.20	.19
PACDN04 Series								
748-PACDN044Y5R	PACDN044Y5R	SOT23-5	±20kV	- - -	.36	.33	.30	.27
748-PACDN045YB6R	PACDN045YB6R	SC70-6	±20kV	- - -	.42	.39	.35	.32
748-PACDN044YB5R	PACDN044YB5R	SC70-5	±20kV	- - -	.36	.33	.30	.27
748-PACDN042Y3R	PACDN042Y3R	SOT23-3	±20kV	- - -	.24	.22	.20	.18

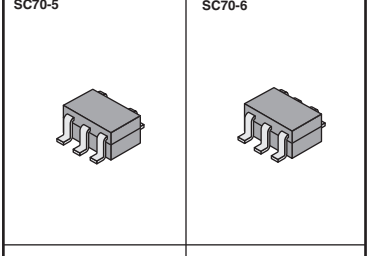


CMD PICO GUARD AC SIGNAL ESD PROTECTORS: CM1214 SERIES

- Single channel ESD protection for an AC signal up to ±5V for 0.25W transmit power
- Connect two channels in series for signals up to +10V (1W transmit power)
- Sub-1pF loading capacitance
- Minimal variation with voltage and temperature
- Can withstand over 1000 ESD strikes at 8kV
- Storage Temperature Range -65 to +150°C
- Operating Temperature Range -40 to +85°C

For quantities of 1000 and up, call for quote.

MOUSER STOCK NO.	CMD Part Number	Package	ESD Protection (IEC)	Channels	Price Each			
					1	50	100	500
748-CM1214-01SO	CM1214-01SO	SOT23-3	±8kV	- - -	.54	.50	.45	.41
748-CM1214-02MR	CM1214-02MR	MSOP-8	±8kV	- - -	.75	.69	.63	.56



CMD LOW CAPACITANCE ESD PROTECTION FOR HIGH-SPEED SERIAL INTERFACES:

CM1263 SERIES

- 2 channels of ESD protection (CM1263-02SE)
- 6 channels of ESD protection (CM1263-06DE)
- 0.85 pF loading capacitance per channel typical (CM1263-02SE)
- 1pF loading capacitance per channel typical (CM1263-06DE)
- Storage Temperature Range -65 to +150°C
- Operating Temperature Range -40 to +85°C

For quantities of 500 and up, call for quote.

MOUSER STOCK NO.	CMD Part Number	Package	ESD Protection (IEC)	Channels	Price Each			
					1	10	50	100
748-CM1263-02SE	CM1263-02SE	SOT-553-5	±15kV	2	.55	.52	.50	.48
748-CM1263-06DE	CM1263-06DE	uDFN-12	±15kV	6	.48	.40	.32	.30

