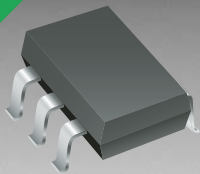


*ROHS COMPLIANT



BOURNS®

Features

- RoHS Compliant*
- Low capacitance - 1.9 pF
- ESD protection >40k V
- Surge protection

Applications

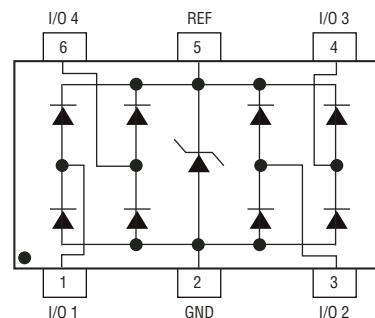
- Personal Digital Assistants (PDAs)
- Mobile phones & accessories
- Memory card protection
- SIM card port protection
- Portable electronics
- Ethernet

CDSC706-0504F – Surface Mount TVS Diode Array

General Information

The CDSC706-0504F device provides ESD, EFT and Surge protection for high speed data ports meeting IEC 61000-4-2 (ESD), IEC 61000-4-4 (EFT) and IEC 61000-4-5 (Surge) requirements. The Transient Voltage Suppressor array, protecting up to 4 data lines, offers a Working Peak Reverse Voltage of 5 V and Minimum Breakdown Voltage of 6 V.

The SC70-6L packaged device will mount directly onto the industry standard SC70-6 footprint. Bourns® Chip Diodes conform to JEDEC standards, are easy to handle with standard pick and place equipment and the flat configuration minimizes roll away.



Electrical Characteristics (@ T_A = 25 °C Unless Otherwise Noted)

Parameter	Symbol	Value	Unit
Peak Pulse Power ($t_p = 8/20 \mu s$) ¹	P _{PK}	200	W
Peak Pulse Current ($t_p = 8/20 \mu s$)	I _{PPM}	6	A
Storage Temperature	T _{STG}	-55 to +150	°C
Operating Temperature	T _{OPR}	-55 to +150	°C

Note:

1. See Peak Pulse Power vs. Pulse Time.

Thermal Characteristics (@ T_A = 25 °C Unless Otherwise Noted)

Parameter	Symbol	Value	Unit
Minimum Breakdown Voltage @ 1 mA	V _{BR}	6	V
Maximum Working Peak Voltage	V _{WM}	5	V
Maximum Leakage Current @ V _{WM}	I _D	3	μA
Maximum Clamping Voltage @ I _P = 1 A	V _C	15	V
Maximum Clamping Voltage @ I _P = 5 A	V _C	25	V
Typical Junction Capacitance @ 0 V 1 MHz	C _D	1.9	pF
Maximum Junction Capacitance @ 0 V 1 MHz	C _D	3	pF

*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.

Specifications are subject to change without notice.

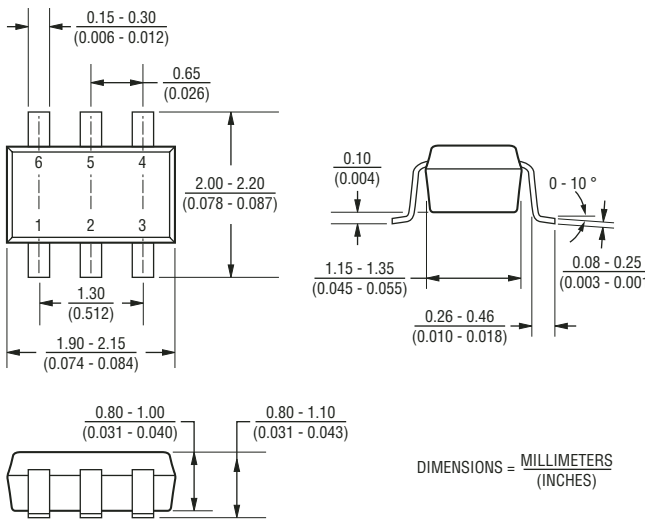
Customers should verify actual device performance in their specific applications.

CDSC706-0504F – Surface Mount TVS Diode Array

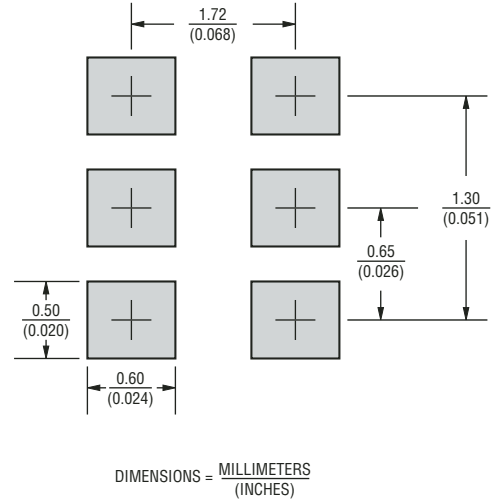


Product Dimensions

This is a molded JEDEC SC70-6L package with Nickel Paladium-Gold (Ni/Pd/Au) on the lead frame. It weighs approximately 7 mg and has a flammability rating of UL 94V-0.



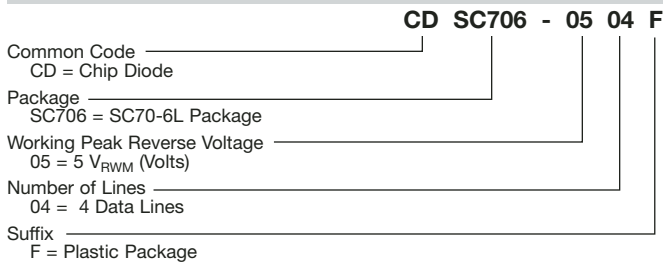
Recommended Footprint



Typical Part Marking

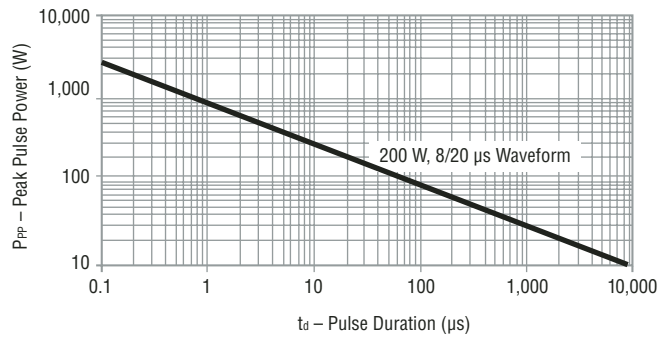
CDSC706-0504F A5

How To Order

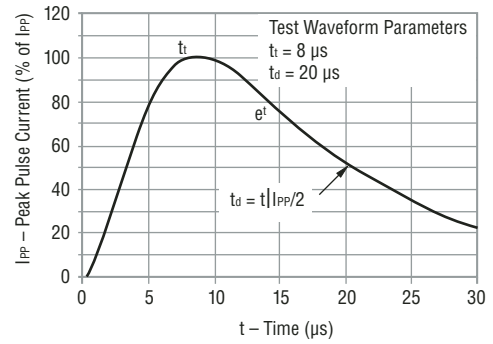


Performance Graphs

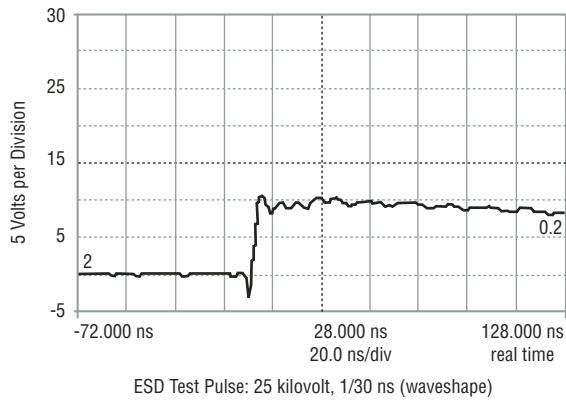
Peak Pulse Power vs Pulse Time



Pulse Waveform



Overshoot & Clamping Voltage



Power Derating Curve

