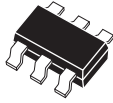


CSMS05
CSMS12
CSMS15
CSMS24

**SURFACE MOUNT
QUAD SILICON TVS/ZENER ARRAY
5 THRU 24 VOLTS**

Specified by
STAND-OFF VOLTAGE



SOT-26 CASE

MARKING CODES

CSMS05: CS05

CSMS12: CS12

CSMS15: CS15

CSMS24: CS24

CentralTM

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CSMS05 Series is a 4 Line TVS/Zener Array packaged in the SOT-26 surface mount case. These devices are designed to protect sensitive equipment against ESD and prevent latch-up events in CMOS circuitry operating at 5V, 12V, 15V, and 24V.

FEATURES

- Very low Clamping Voltage
- Low Leakage Current
- 350W Power Dissipation
- SMD SOT-26 Package
- IEC61000-4-2 ESD 20kV air, 15kV Contact Compliance

APPLICATIONS:

- PDA's
- Cell Phones
- Memory Card Ports
- Instrumentation

MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Peak Pulse Power
ESD Voltage (HBM)
Operating Temperature Range
Storage Temperature Range

SYMBOL

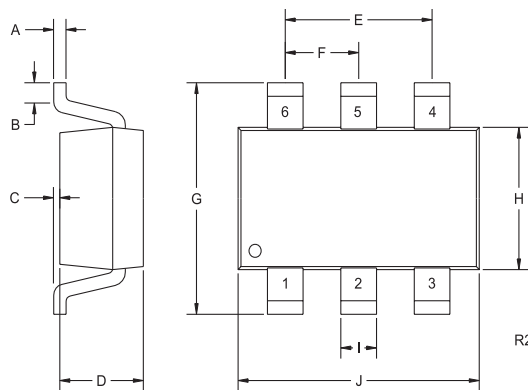
		UNITS
P_{pp}	350	W
V_{ESD}	>25	kV
T_J	-50 to +125	$^{\circ}\text{C}$
T_{stg}	-50 to +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

TYPE NO.	Reverse Stand-Off Voltage	Reverse Breakdown Voltage		Reverse Leakage Current		Clamping Voltage 8 x 20 μs		Clamping Voltage 8 x 20 μs		Off State Junction Capacitance ($V_R=0\text{V}$, $f=1\text{MHz}$)
	V_{WRM} MAX (V)	V_{BR} MIN (V)	I_{BR} (mA)	I_R MAX (μA)	V_R (V)	V_{cl} MAX (V)	I_{PP} (A)	V_{cl} MAX (V)	I_{PP} (A)	C_J MAX (pF)
CSMS05	5	6.0	1.0	5.0	5	9.5	5.0	13	24	200
CSMS12	12	13.3	1.0	5.0	12	17	5.0	21	24	90
CSMS15	15	16.7	1.0	5.0	15	22	5.0	27	24	70
CSMS24	24	26.7	1.0	5.0	24	35	5.0	40	24	50

**SURFACE MOUNT
QUAD SILICON TVS/ZENER ARRAY
5 THRU 24 VOLTS**

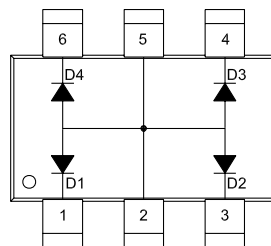
SOT-26 - CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.007	0.11	0.19
B	0.016	-	0.40	-
C	-	0.004	-	0.10
D	0.039	0.047	1.00	1.20
E	0.074	0.075	1.88	1.92
F	0.037	0.038	0.93	0.97
G	0.102	0.118	2.60	3.00
H	0.059	0.067	1.50	1.70
I	0.016	-	0.41	-
J	0.110	0.118	2.80	3.00

SOT-26 (REV: R2)

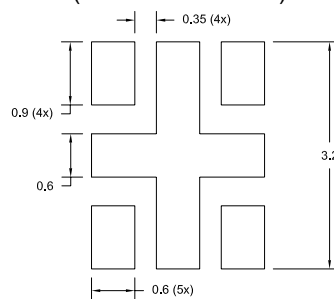
Pin Configuration



Lead code:

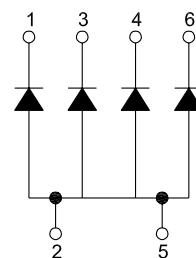
- 1) Cathode D1
- 2) Anode D1, D2, D3, D4
- 3) Cathode D2
- 4) Cathode D3
- 5) Anode D1, D2, D3, D4
- 6) Cathode D4

**Suggested mounting pad layout
for maximum power dissipation
(Dimensions in mm)**



For Standard mounting, refer to SOT-26 Package Details.

Circuit Diagram



R0 (13-September 2005)