

CSMS05 CSMS12
CSMS15 CSMS24

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



www.centrasemi.com

Specified by
STAND-OFF VOLTAGE



SOT-26 CASE

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.

MARKING CODE:

CSMS05: CS05
CSMS12: CS12
CSMS15: CS15
CSMS24: CS24

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:

- PDAs
- Cell Phones
- Memory Card Ports
- Instrumentation

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

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

SYMBOL

P_{pp} 350
 V_{ESD} >25
 T_J -50 to +125
 T_{stg} -50 to +150

UNITS

W
kV
 $^\circ\text{C}$
 $^\circ\text{C}$

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

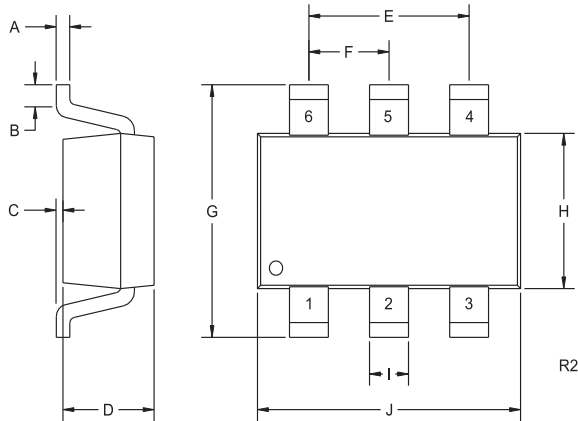
TYPE	Maximum Reverse Stand-Off Voltage	Minimum Reverse Breakdown Voltage		Maximum Reverse Leakage Current		Maximum Clamping Voltage 8x20µs		Maximum Clamping Voltage 8x20µs		Maximum Off State Junction Capacitance ($V_R=0, f=1.0\text{MHz}$) C_J
	V_{RWM}	V_{BR}	I_{BR}	I_R	V_R	V_{cl}	I_{PP}	V_{cl}	I_{PP}	
	V	V	mA	µA	V	V	A	V	A	pF
CSMS05	5.0	6.0	1.0	5.0	5.0	9.8	5.0	13	24	225
CSMS12	12	13.3	1.0	1.0	12	20	5.0	23	15	100
CSMS15	15	16.7	1.0	1.0	15	24	5.0	29	12	80
CSMS24	24	26.7	1.0	1.0	24	40	5.0	44	8.0	60

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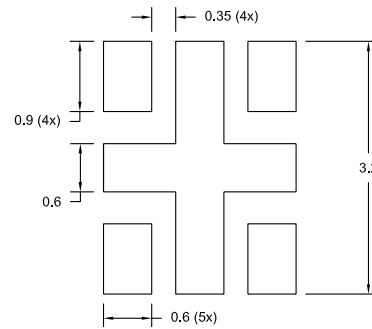
SOT-26 CASE - MECHANICAL OUTLINE



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

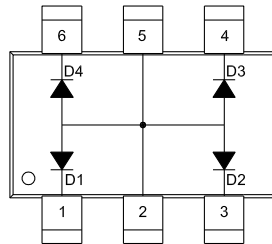
SOT-26 (REV: R2)

**SUGGESTED MOUNTING PADS
 For Maximum Power Dissipation
 (Dimensions in mm)**

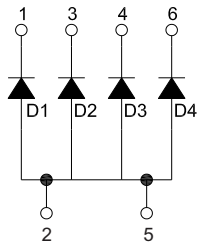


For Standard mounting, refer to
 SOT-26 Package Details.

PIN CONFIGURATION



SCHEMATIC



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

R2 (17-September 2010)