



**CMNTVS12V**

**SURFACE MOUNT SILICON  
UNI-DIRECTIONAL  
12 VOLT QUAD TVS ARRAY**

**FEMTOmini™**



**SOT-953 CASE**

• Device is *Halogen Free* by design

**APPLICATIONS:**

- PDAs
- Memory Card Ports
- Mobile Phones
- Instrumentation

**MAXIMUM RATINGS:** (T<sub>A</sub>=25°C)

Peak Power Dissipation (8x20µs)  
ESD Voltage (Human Body Model - HBM)  
Operating and Storage Junction Temperature

**Central™**  
**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMNTVS12V is a 4-line TVS arrays in a space saving SOT-953 surface mount package. This device is designed to protect sensitive equipment against ESD damage.

**MARKING CODE: CY**

**FEATURES:**

- Small, **FEMTOmini™** 1 x 0.8mm, SOT-953 Surface Mount Package
- Low Capacitance
- Low Leakage Current
- ESD Protection IEC 61000-4-2: Level 4 (8kV) HBM
- 4-Line Array

**SYMBOL**

P<sub>PK</sub> 18  
V<sub>ESD</sub> 8.0  
T<sub>J</sub>, T<sub>stg</sub> -55 to +150

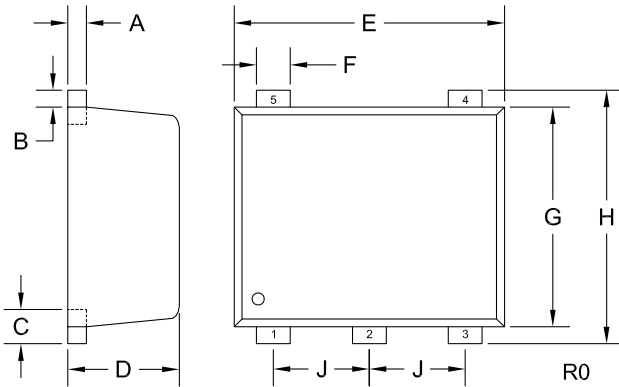
**UNITS**

W  
kV  
°C

**ELECTRICAL CHARACTERISTICS PER DIODE:** (T<sub>A</sub>=25°C)

Breakdown Voltage V <sub>BR</sub> @ 5.0mA			Maximum Leakage Current I <sub>RWM</sub> @ V <sub>RWM</sub>		Maximum Clamping Voltage V <sub>C</sub> @ I <sub>PP</sub>		Maximum Capacitance @ 0V Bias	Maximum Capacitance @ 3V Bias
MIN (V)	NOM (V)	MAX (V)	(µA)	(V)	(V)	(A)	(pF)	(pF)
11.4	12.0	12.7	0.5	9.0	18	1.0	10	6.0

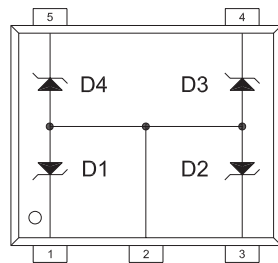
**SOT-953 CASE - MECHANICAL OUTLINE**



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.002	0.006	0.050	0.150
B	0.002	0.006	0.050	0.150
C	0.005	0.007	0.125	0.175
D	0.016	0.020	0.400	0.500
E	0.037	0.041	0.950	1.050
F	0.004	0.008	0.100	0.200
G	0.030	0.033	0.750	0.850
H	0.037	0.041	0.950	1.050
J	0.014		0.350	

SOT-953 (REV: R0)

**PIN CONFIGURATION**



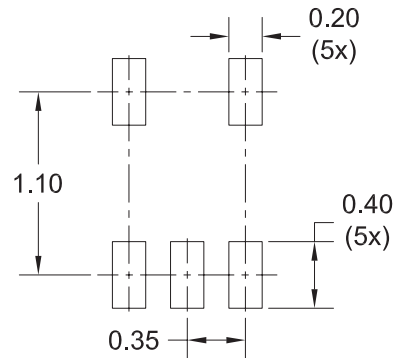
**LEAD CODE:**

- 1) CATHODE D1
- 2) ANODE D1, D2, D3, D4
- 3) CATHODE D2
- 4) CATHODE D3
- 5) CATHODE D4

**MARKING CODE: CY**

**SUGGESTED MOUNTING PADS**

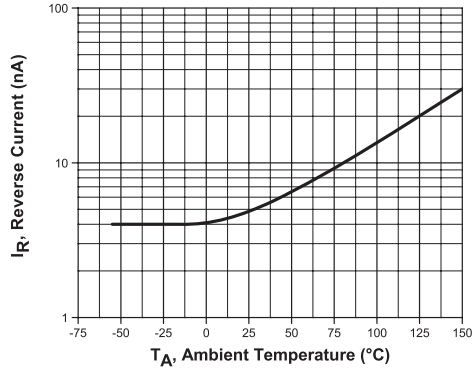
(Dimensions in mm)



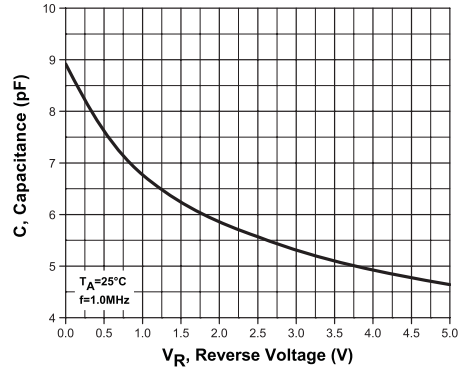
R0

TYPICAL ELECTRICAL CHARACTERISTICS

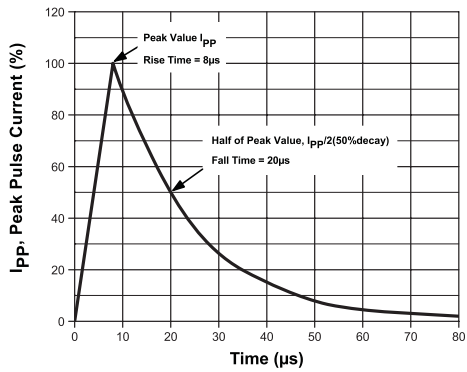
Leakage Current



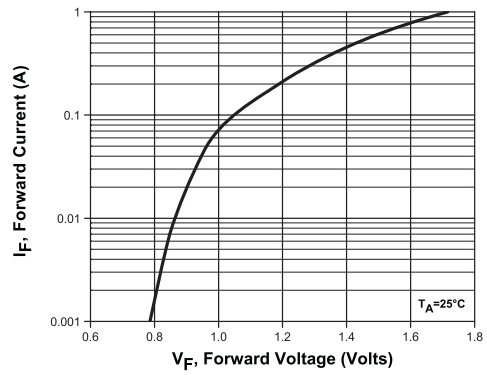
Capacitance



8 x 20  $\mu\text{s}$  Pulse Waveform



Forward Voltage



Normalized Power & Current Derating

