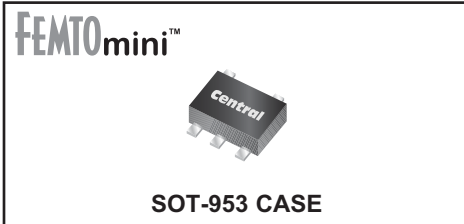


**CMNTVS12V**  
**SURFACE MOUNT**  
**UNI-DIRECTIONAL**  
**12 VOLT SILICON QUAD TVS ARRAY**



[www.centrasemi.com](http://www.centrasemi.com)



• Device is *Halogen Free* by design

**APPLICATIONS:**

- PDAs
- Memory Card Ports
- Mobile Phones
- Instrumentation

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

Peak Power Dissipation (8x20 $\mu\text{s}$ )  
 ESD Voltage (Human Body Model - HBM)  
 Operating and Storage Junction Temperature

**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**<sup>™</sup> 1.0 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		UNITS
$P_{PK}$	18	W
$V_{ESD}$	8.0	kV
$T_J, T_{stg}$	-55 to +150	$^\circ\text{C}$

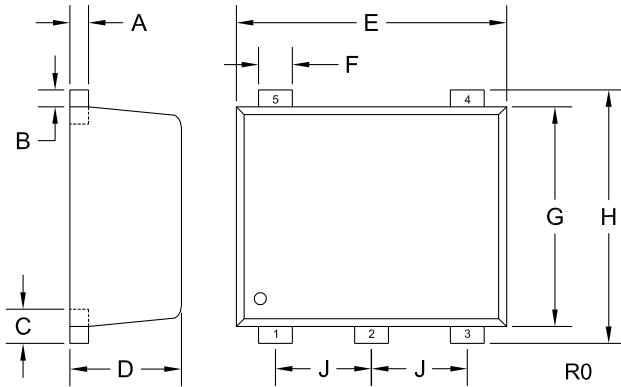
**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^\circ\text{C}$ )

Breakdown Voltage $V_{BR}$ @ 5.0mA			Maximum Leakage Current $I_{RWM}$ @ $V_{RWM}$		Maximum Clamping Voltage $V_C$ @ $I_{PP}$		Maximum Capacitance @ 0V Bias	Maximum Capacitance @ 3V Bias
MIN V	NOM V	MAX V	$\mu\text{A}$	V	V	A	pF	pF
11.4	12.0	12.7	0.5	9.0	18	1.0	10	6.0

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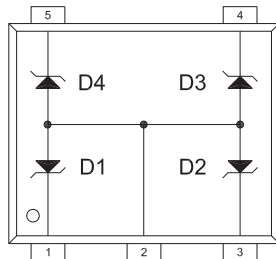
**SOT-953 CASE - MECHANICAL OUTLINE**



SYMBOL	DIMENSIONS			
	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**



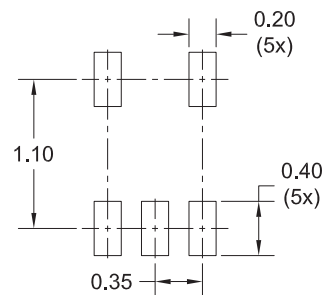
**LEAD CODE:**

- 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)



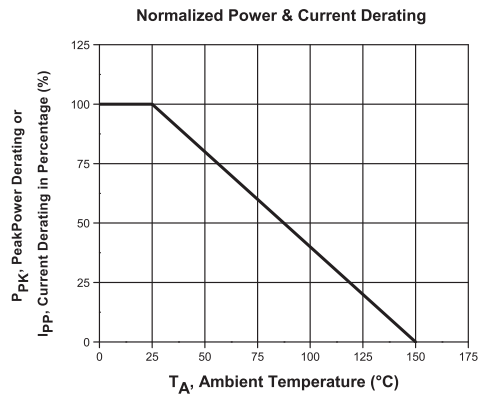
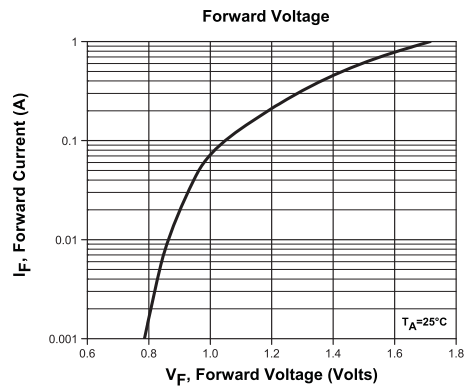
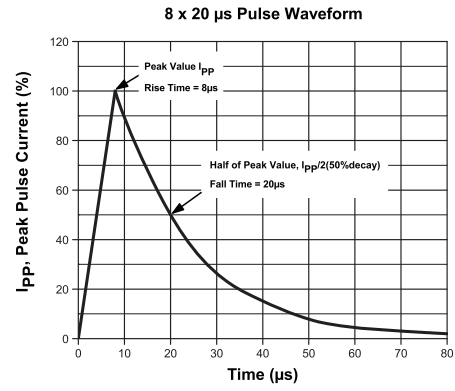
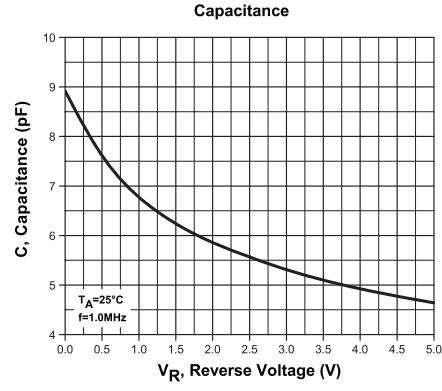
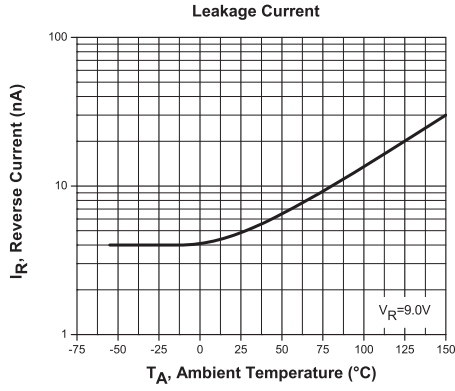
R0

R3 (3-January 2012)

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**TYPICAL ELECTRICAL CHARACTERISTICS**



R3 (3-January 2012)