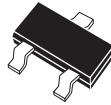


CSL05  
CSL05D

**SURFACE MOUNT  
ULTRA LOW CAPACITANCE  
TRANSIENT VOLTAGE SUPPRESSOR**



**SOT-23 CASE**

**Central**<sup>TM</sup>  
**Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CSL05 (Single) and CSL05D (Dual) types are ultra low capacitance transient voltage suppressors packaged in the SOT-23 surface mount package. These devices provide excellent protection from spurious voltage transients. The very low capacitance reduces insertion loss to minimize the affect on the data line through-put. Typical applications include: mobile phones, digital cameras, USB ports, MP3 players, and Ethernet port protection.

**MARKING CODE:**

**CSL05 (Single): CL05**

**CSL05D (Dual): CL5D**

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

	<b>SYMBOL</b>		<b>UNITS</b>
Peak Pulse Power (8 x 20 $\mu\text{s}$ Waveform)	$P_{PK}$	400	W
Peak Pulse Current (8 x 20 $\mu\text{s}$ Waveform)	$I_{PP}$	17	A
ESD Voltage (HBM)	$V_{ESD}$	>25	kV
Operating Temperature	$T_J$	-50 to +125	$^{\circ}\text{C}$
Storage Temperature	$T_{stg}$	-50 to +150	$^{\circ}\text{C}$

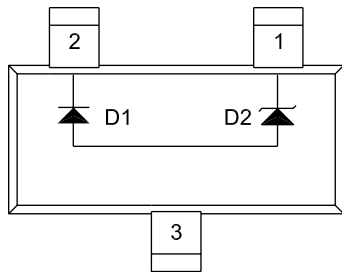
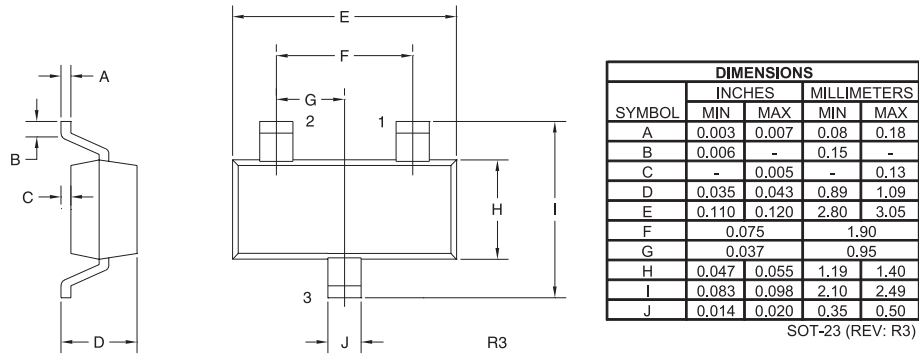
**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>MAX</b>	<b>UNITS</b>
$I_R$	$V_{RWM}=5.0\text{V}$		5.0	$\mu\text{A}$
$BV_R$	$I_t=1.0\text{mA}$	6.0		V
$V_C$	$I_{PP}=1.0\text{A}$ , $t_p=8 / 20\mu\text{s}$		9.5	V
$V_C$	$I_{PP}=5.0\text{A}$ , $t_p=8 / 20\mu\text{s}$		12	V
$C_j$	$V_R=0\text{V}$ , $f=1.0\text{MHz}$		1.2	pF

R0 (1-April 2005)

**SURFACE MOUNT  
ULTRA LOW CAPACITANCE  
TRANSIENT VOLTAGE SUPPRESSOR**

**SOT-23 CASE - MECHANICAL OUTLINE**

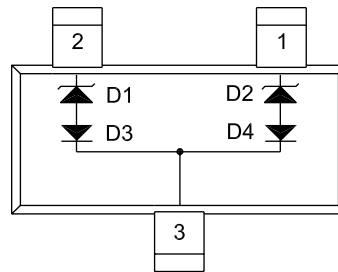


**CSL05**

**Lead Code:**

- 1) CATHODE D2
- 2) CATHODE D1
- 3) NO CONNECTION

**MARKING CODE: CL05**



**CSL05D**

**Lead Code:**

- 1) CATHODE D2
- 2) CATHODE D1
- 3) CATHODE D3, CATHODE D4

**MARKING CODE: CL5D**