

CSL05
CSL05D

**SURFACE MOUNT SILICON
ULTRA LOW CAPACITANCE
TRANSIENT VOLTAGE SUPPRESSORS**



SOT-23 CASE



www.centrasemi.com

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 CODES: CSL05 (Single):CL05
CSL05D (Dual): CL5D**

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

Peak Pulse Power, $t_p=8 \times 20\mu\text{s}$
Peak Pulse Current, $t_p=8 \times 20\mu\text{s}$
ESD Voltage (IEC 61000-4-2, Air)
ESD Voltage (IEC 61000-4-2, Contact)
Operating Junction Temperature
Storage Temperature

SYMBOL

P_{PK}	400
I_{PP}	17
V_{ESD}	25
V_{ESD}	25
T_J	-50 to +125
T_{stg}	-50 to +150

UNITS

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

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

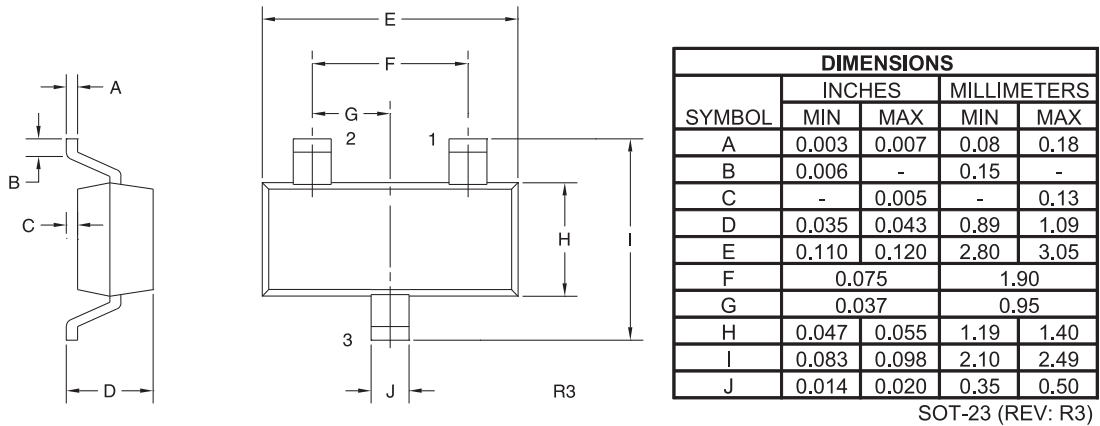
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_{RWM}=5.0\text{V}$		5.0	μA
BV_R	$I_t=1.0\text{mA}$	6.0		V
V_C	$I_{pp}=1.0\text{A}$, $t_p=8 \times 20\mu\text{s}$		9.5	V
V_C	$I_{pp}=5.0\text{A}$, $t_p=8 \times 20\mu\text{s}$		12	V
C_J	$V_R=0$, $f=1.0\text{MHz}$		1.2	pF

CSL05
CSL05D

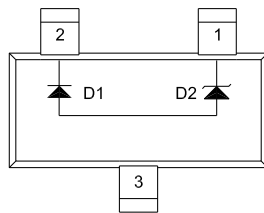


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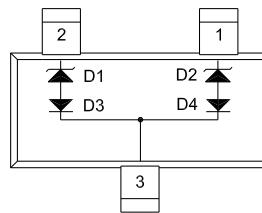
SOT-23 CASE - MECHANICAL OUTLINE



PIN CONFIGURATIONS



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, D4
MARKING CODE: CL5D

R2 (2-April 2015)

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SERVICES

- Bonded Inventory
- Custom Electrical Screening
- Custom Electrical Characteristic Curves
- SPICE Models
- Custom Packaging
- Package Base Options
- Custom Device Development/ Multi Discrete Modules (MDM™)
- Bare Die Available for Hybrid Applications

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R2 (2-April 2015)