

CSL05
CSL05D

**SURFACE MOUNT
ULTRA LOW CAPACITANCE SILICON
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 minimizes 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 (HBM)

Operating Junction Temperature

Storage Temperature

SYMBOL

P_{PK}

I_{PP}

V_{ESD}

T_J

T_{stg}

400

17

>25

-50 to +125

-50 to +150

UNITS

W

A

kV

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

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

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

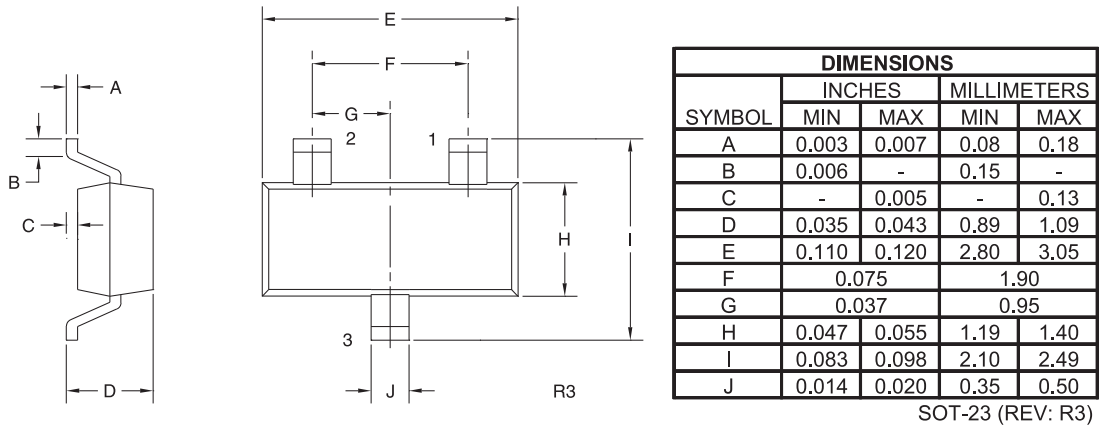
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_{RWM}=5.0\text{V}$		5.0	μA
BV_R	$I_t=1.0\text{mA}$	6.0		V
V_C	$I_{PP}=1.0\text{A}$, $t_p=8\times 20\mu\text{s}$		9.5	V
V_C	$I_{PP}=5.0\text{A}$, $t_p=8\times 20\mu\text{s}$		12	V
C_J	$V_R=0$, $f=1.0\text{MHz}$		1.2	pF

CSL05
CSL05D

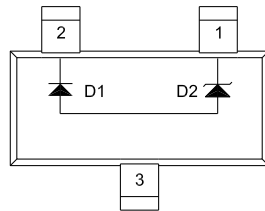
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SOT-23 CASE - MECHANICAL OUTLINE



PIN CONFIGURATIONS

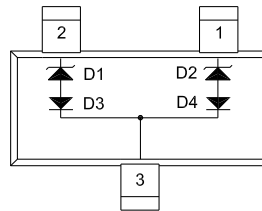


CSL05

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

R1 (17-February 2010)