

**CMSD2004S****HIGH VOLTAGE
SWITCHING DIODE****SUPERTM
mini****SOT-323 CASE****CentralTM
Semiconductor Corp.****DESCRIPTION**

The CENTRAL SEMICONDUCTOR CMSD2004S type is a silicon switching diode manufactured by the epitaxial planar process, designed for applications requiring high voltage capability.

The following configurations are available:

CMSD2004S

DUAL, IN SERIES

MARKING CODE: B6D

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

Continuous Reverse Voltage
Peak Repetitive Reverse Voltage
Peak Repetitive Reverse Current
Continuous Forward Current
Peak Repetitive Forward Current
Forward Surge Current, $t_p=1\ \mu\text{s}$
Forward Surge Current, $t_p=1\ \text{s}$
Power Dissipation
Operating and Storage
Junction Temperature
Thermal Resistance

SYMBOL

V_R 240
 V_{RRM} 300
 I_O 200
 I_F 225
 I_{FRM} 625
 I_{FSM} 4000
 I_{FSM} 1000
 P_D 250
 T_J, T_{stg} -65 to +150
 θ_{JA} 500

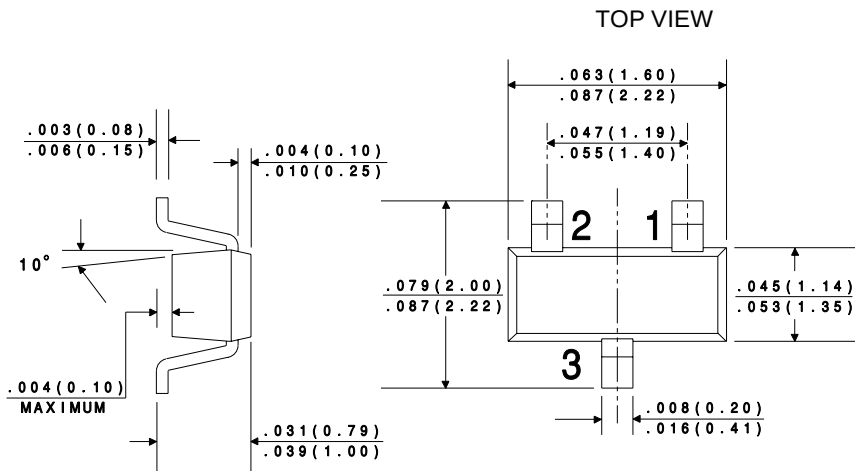
UNITS

V
V
mA
mA
mA
mA
mA
mW
 $^\circ\text{C}$
 $^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
BV_R	$I_R=100\ \mu\text{A}$	300		V
I_R	$V_R=200\text{V}$		-	nA
I_R	$V_R=200\text{V}, T_A=150^\circ\text{C}$		-	μA
I_R	$V_R=240\text{V}$		100	nA
I_R	$V_R=240\text{V}, T_A=150^\circ\text{C}$		100	μA
V_F	$I_F=100\text{mA}$		1.0	V
C_T	$V_R=0, f=1\ \text{MHz}$		5.0	pF
t_{rr}	$I_F=I_R=30\text{mA}, \text{RECOV. TO } 3.0\text{mA}, R_L=100\ \Omega$		50	ns

All dimensions in inches (mm).



LEAD CODE

