

**CMSD2004S****HIGH VOLTAGE  
SWITCHING DIODE****Central™  
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.

**SUPER™  
mini****SOT-323 CASE**

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
$\Theta_{JA}$	500

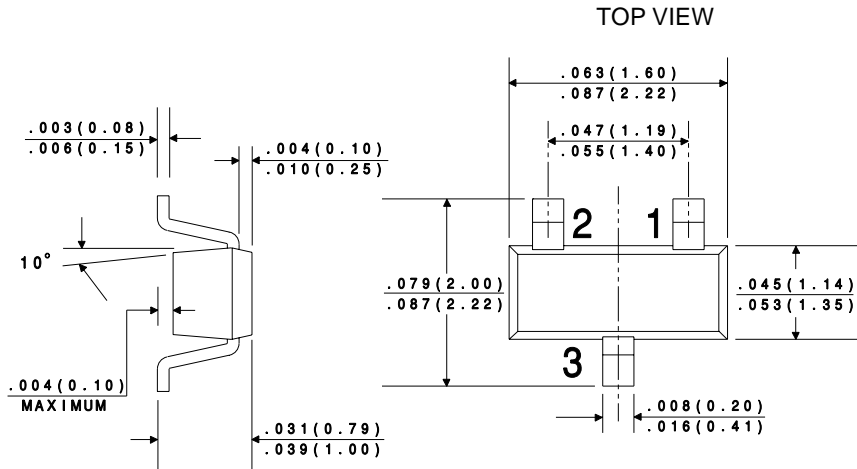
**UNITS**

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

**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>UNIT</b>
$BV_R$	$I_R=100\ \mu\text{A}$	300		V
$I_R$	$V_R=200\text{V}$		-	nA
$I_R$	$V_R=200\text{V}, T_A=150^\circ\text{C}$		-	$\mu\text{A}$
$I_R$	$V_R=240\text{V}$		100	nA
$I_R$	$V_R=240\text{V}, T_A=150^\circ\text{C}$		100	$\mu\text{A}$
$V_F$	$I_F=100\text{mA}$		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**

