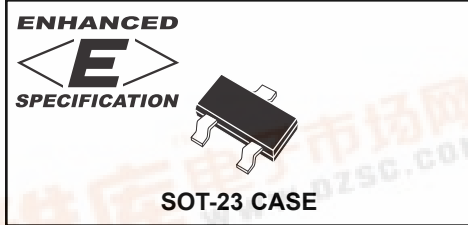


CMPSH-3E  
 CMPSH-3AE  
 CMPSH-3CE  
 CMPSH-3SE

**ENHANCED SPECIFICATION  
 SURFACE MOUNT  
 SILICON SCHOTTKY DIODES**



CMPSH-3E: SINGLE  
 CMPSH-3AE: DUAL, COMMON ANODE  
 CMPSH-3CE: DUAL, COMMON CATHODE  
 CMPSH-3SE: DUAL, IN SERIES

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

- ◆ **Peak Repetitive Reverse Voltage**
- ◆ **Continuous Forward Current**  
 Peak Repetitive Forward Voltage  
 Forward Surge Current,  $t_p=10\text{ms}$   
 Power Dissipation  
 Operating and Storage  
 Junction Temperature  
 Thermal Resistance

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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPSH-3E Series types are Enhanced Versions of the CMPSH-3 Series of Silicon Schottky Diodes in an SOT-23 Surface Mount Package.

**FEATURED ENHANCED SPECIFICATIONS:**

- ◆  $I_F$  from 100 mA max to 200 mA max.
- ◆  $BV_R$  from 30V min to 40V min.
- ◆  $V_F$  from 1.0V max to 0.8V max.

**MARKING CODE: D95E**  
**MARKING CODE: DB1E**  
**MARKING CODE: DB2E**  
**MARKING CODE: DA5E**

SYMBOL		UNITS
$V_{RRM}$	40	V
$I_F$	200	mA
$I_{FRM}$	350	mA
$I_{FSM}$	750	mA
$P_D$	350	mW
$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
$\theta_{JA}$	357	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
◆ $BV_R$	$I_R=100\mu\text{A}$	40	50		V
$V_F$	$I_F=2.0\text{mA}$		0.29	0.33	V
◆ $V_F$	$I_F=15\text{mA}$		0.37	0.42	V
◆ $V_F$	$I_F=100\text{mA}$		0.61	0.80	V
◆◆ $V_F$	$I_F=200\text{mA}$		0.65	1.0	V
$I_R$	$V_R=25\text{V}$		90	500	nA
$I_R$	$V_R=25\text{V}, T_A=100^\circ\text{C}$		25	100	$\mu\text{A}$
$C_T$	$V_R=1.0\text{V}, f=1\text{MHz}$		7.0		pF
$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$			5.0	ns

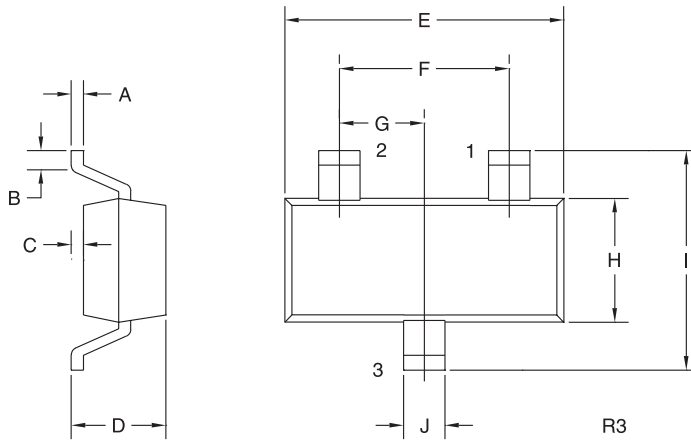
- ◆ Enhanced specification.
- ◆◆ Additional Enhanced specification.

R2 (6-August 2003)



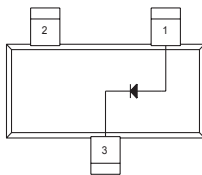
**ENHANCED SPECIFICATION  
SURFACE MOUNT  
SILICON SCHOTTKY DIODES**

**SOT-23 CASE - MECHANICAL OUTLINE**



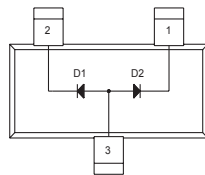
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)



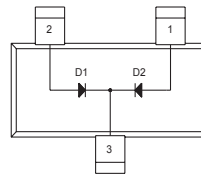
**LEAD CODE:**  
**CMP SH-3E**  
1) Anode  
2) No Connection  
3) Cathode

**MARKING  
CODE: D95E**



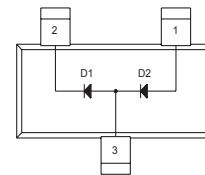
**LEAD CODE:**  
**CMP SH-3AE**  
1) Cathode D2  
2) Cathode D1  
3) Anode D1, Anode D2

**MARKING  
CODE: DB1E**



**LEAD CODE:**  
**CMP SH-3CE**  
1) Anode D2  
2) Anode D1  
3) Cathode D1, Cathode D2

**MARKING  
CODE: DB2E**



**LEAD CODE:**  
**CMP SH-3SE**  
1) Anode D2  
2) Cathode D1  
3) Anode D1, Cathode D2

**MARKING  
CODE: DA5E**