ENHANCED SPECIFICATION SURFACE MOUNT SILICON SCHOTTKY DIODES





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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPSH-3E series devices 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 100mA MAX to 200mA MAX
- ♦ BV_R from 30V MIN to 40V MIN
- ♦ V_F from 1.0 V MAX to 0.8 V MAX

CMPSH-3E: SINGLE

CMPSH-3AE: DUAL, COMMON ANODE CMPSH-3CE: DUAL, COMMON CATHODE

CMPSH-3SE: DUAL, IN SERIES

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

MAXIMUM RATINGS: (T _A =25°C)	SYMBOL		UNITS
♦ Peak Repetitive Reverse Voltage	V_{RRM}	40	V
♦ Continuous Forward Current	I _F	200	mA
Peak Repetitive Forward Voltage	I _{FRM}	350	mA
Forward Surge Current, tp=10ms	I _{FSM}	750	mA
Power Dissipation	P_{D}	350	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	$\Theta_{\sf JA}$	357	°C/W
FI FCTRICAL CHARACTERISTICS PER DIODE	· (T.=25°C unless	otherwise noted)	

ELECTRICAL	. CHARACTERISTICS PER I	DIODE: (T _A =25°C unles	s otherwise	noted)	
SYMBOL	TEST CONDITIONS	` ^ MIN	TYP	MAX	UNITS
I_{R}	V _R =25V		90	500	nA
I_{R}	V _R =25V, T _A =100°C		25	100	μΑ
♦ BV _R	I _R =100μA	40	50		V
V_{F}	I _F =2.0mA		0.29	0.33	V
◆ V _F	I _F =15mA		0.37	0.42	V
◆ V _F	I _F =100mA		0.51	0.80	V
• • V _F	I _F =200mA		0.65	1.0	V
CJ	V_R =1.0 V_r , f=1.0 V_r		7.0		pF

[•] Enhanced specification.

t_{rr}

 $I_F = I_R = 10$ mA, $I_{rr} = 1.0$ mA, $R_I = 100$ Ω

ns

5.0

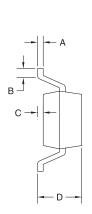
^{♦ ♦} Additional Enhanced specification.

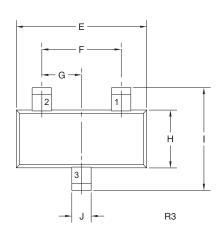


SURFACE MOUNT SILICON **SCHOTTKY DIODES**



SOT-23 CASE - MECHANICAL OUTLINE

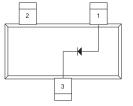


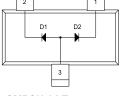


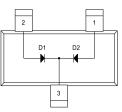
DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.003	0.007	0.08	0.18			
В	0.006	-	0.15	-			
С	-	0.005	-	0.13			
D	0.035	0.043	0.89	1.09			
E	0.110	0.120	2.80	3.05			
F	0.075		1.90				
G	0.037		0.95				
Н	0.047	0.055	1.19	1.40			
	0.083	0.098	2.10	2.49			
J	0.014	0.020	0.35	0.50			

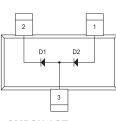
SOT-23 (REV: R3)

PIN CONFIGURATIONS









CMPSH-3E

LEAD CODE:

- 1) Anode
- 2) No Connection
- 3) Cathode

CMPSH-3AE

- **LEAD CODE:**
- 1) Cathode D2
- 2) Cathode D1

3) Anode D1, D2

CMPSH-3CE

LEAD CODE:

- 1) Anode D2
- 2) Anode D1
- 3) Cathode D1, D2

CMPSH-3SE

LEAD CODE:

- 1) Anode D2
- 2) Cathode D1
- 3) Anode D1, Cathode D2

MARKING CODE: D95E

MARKING CODE: DB1E

MARKING CODE: DB2E

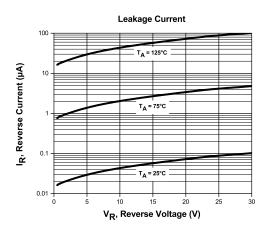
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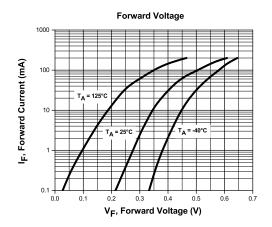


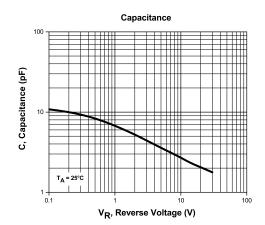
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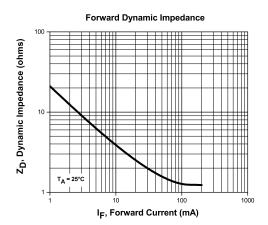


TYPICAL ELECTRICAL CHARACTERISTICS







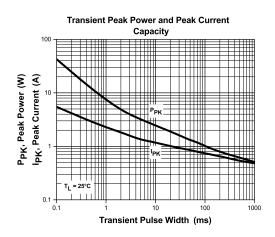


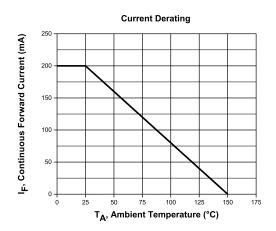


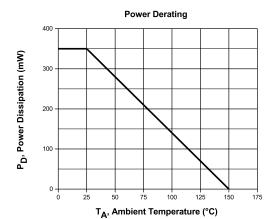
SURFACE MOUNT SILICON SCHOTTKY DIODES



TYPICAL ELECTRICAL CHARACTERISTICS









OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- · Inventory bonding
- · Consolidated shipping options

- Custom bar coding for shipments
- · Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- · Online technical data and parametric search
- SPICE models
- · Custom electrical curves
- · Environmental regulation compliance
- · Customer specific screening
- · Up-screening capabilities

- Special wafer diffusions
- · PbSn plating options
- · Package details
- · Application notes
- · Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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