

CMP SH-3  
CMP SH-3A  
CMP SH-3C  
CMP SH-3S

**SURFACE MOUNT SILICON  
SCHOTTKY DIODES**



**SOT-23 CASE**



[www.centra semi.com](http://www.centra semi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMP SH-3 series devices are silicon Schottky diodes designed for surface mount fast switching applications requiring a low forward voltage drop.

The following configurations are available:

CMP SH-3 SINGLE  
CMP SH-3A DUAL, COMMON ANODE  
CMP SH-3C DUAL, COMMON CATHODE  
CMP SH-3S DUAL, IN SERIES

**MARKING CODE: D95**  
**MARKING CODE: DB1**  
**MARKING CODE: DB2**  
**MARKING CODE: DA5**

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

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	30	V
Continuous Forward Current	$I_F$	100	mA
Peak Repetitive Forward Current	$I_{FRM}$	350	mA
Peak Forward Surge Current, $t_p=10\text{ms}$	$I_{FSM}$	750	mA
Power Dissipation	$P_D$	350	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	$\theta_{JA}$	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
$I_R$	$V_R=25\text{V}$		90	500	nA
$I_R$	$V_R=25\text{V}, T_A=100^{\circ}\text{C}$		25	100	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	30			V
$V_F$	$I_F=2.0\text{mA}$		0.29	0.33	V
$V_F$	$I_F=15\text{mA}$		0.37	0.45	V
$V_F$	$I_F=100\text{mA}$		0.51	1.00	V
$C_J$	$V_R=0, f=1.0\text{MHz}$			20	pF
$t_{rr}$	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$			5.0	ns

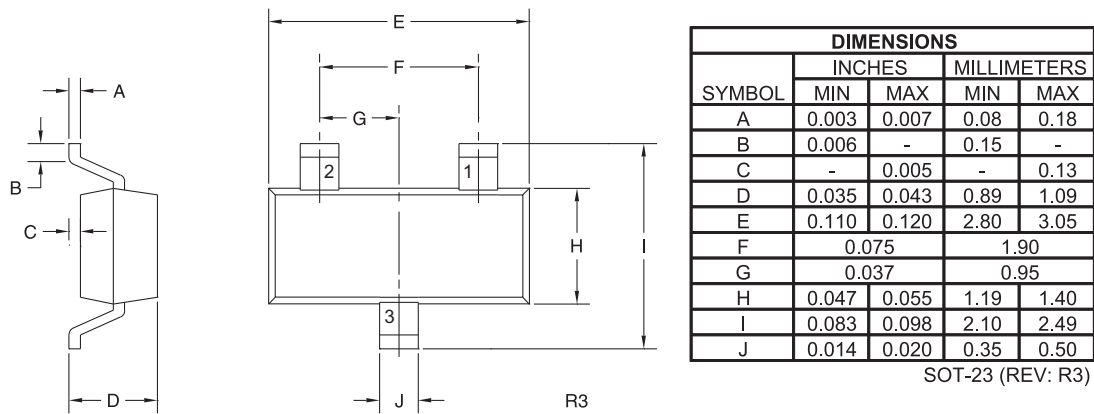
R8 (8-September 2016)

CMPH-3  
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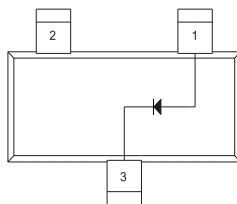
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## SOT-23 CASE - MECHANICAL OUTLINE



## PIN CONFIGURATIONS

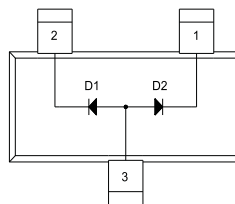


### CMPH-3

#### LEAD CODE:

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

MARKING CODE: D95

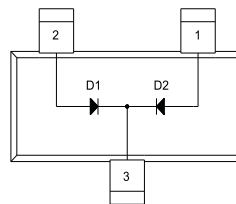


### CMPH-3A

#### LEAD CODE:

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

MARKING CODE: DB1

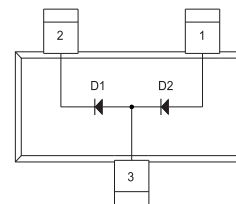


### CMPH-3C

#### LEAD CODE:

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

MARKING CODE: DB2



### CMPH-3S

#### LEAD CODE:

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

MARKING CODE: DA5

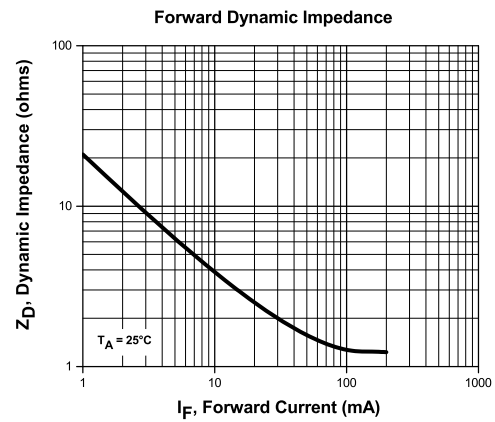
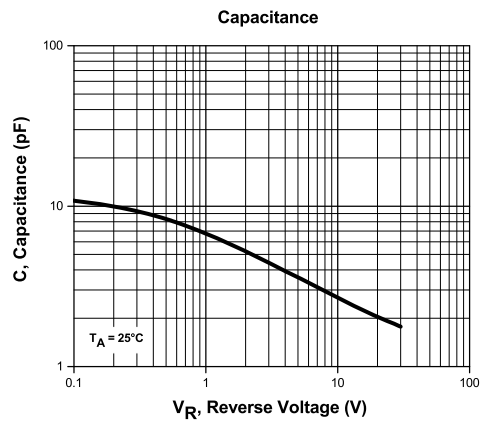
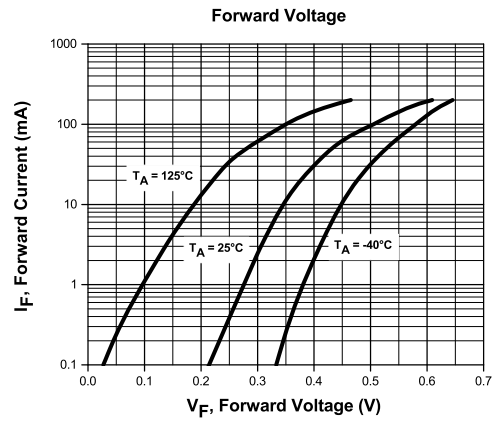
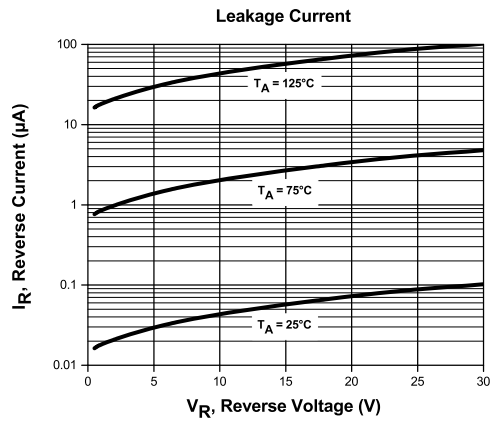
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## TYPICAL ELECTRICAL CHARACTERISTICS



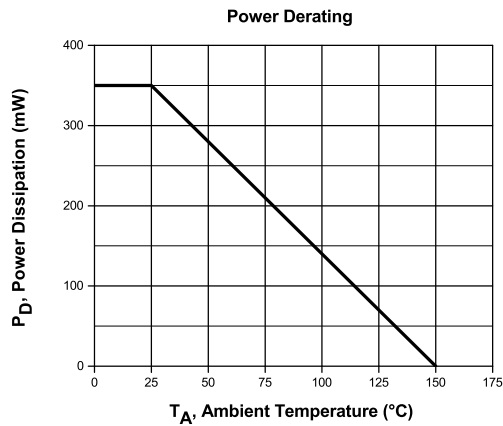
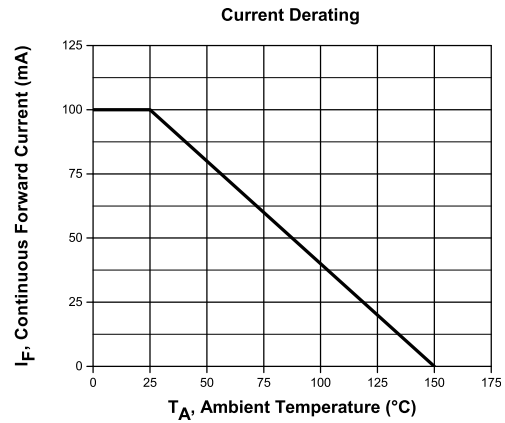
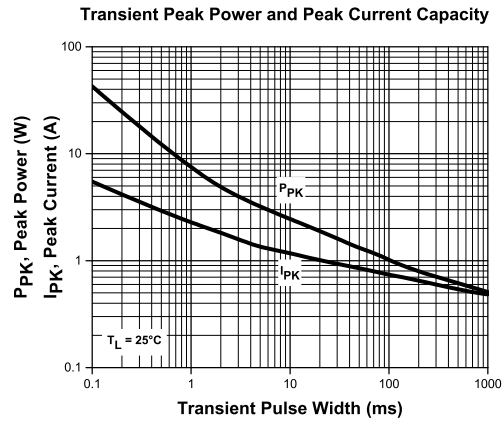
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## TYPICAL ELECTRICAL CHARACTERISTICS



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## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2<sup>nd</sup> 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

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### 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).

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### CONTACT US

#### Corporate Headquarters & Customer Support Team

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