



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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CMHSH5-4

**SURFACE MOUNT SILICON  
SCHOTTKY RECTIFIER  
500mA, 40 VOLT**



**SOD-123 CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMHSH5-4 type is a silicon Schottky rectifier, epoxy molded in a surface mount package, designed for high current applications requiring a low forward voltage drop.

**MARKING CODE: C54**

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

Peak Repetitive Reverse Voltage
Peak Working Reverse Voltage
DC Blocking Voltage
Average Rectified Current
Peak Repetitive Forward Current
(@ rated $V_R$ , square wave, 20kHz, $T_C=115^\circ\text{C}$ )
Peak Forward Surge Current
(@ rated load, halfwave, single phase, 60Hz)
Power Dissipation
Operating Junction Temperature
Storage Temperature
Thermal Resistance
Thermal Resistance

SYMBOL		UNITS
$V_{RRM}$	40	V
$V_{RWM}$	40	V
$V_R$	40	V
$I_O$	500	mA
$I_{FRM}$	1.0	A
$I_{FSM}$	5.5	A
$P_D$	400	mW
$T_J$	-65 to +125	$^\circ\text{C}$
$T_{stg}$	-65 to +150	$^\circ\text{C}$
$\theta_{JL}$	118	$^\circ\text{C}/\text{W}$
$\theta_{JA}$	250	$^\circ\text{C}/\text{W}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=20\text{V}$		0.7	10	$\mu\text{A}$
$I_R$	$V_R=20\text{V}, T_A=100^\circ\text{C}$		0.2	5.0	mA
$I_R$	$V_R=40\text{V}$		1.7	20	$\mu\text{A}$
$I_R$	$V_R=40\text{V}, T_A=100^\circ\text{C}$		0.38	13	mA
$BV_R$	$I_R=10\mu\text{A}$	40			V
$V_F$	$I_F=500\text{mA}$		460	510	mV
$V_F$	$I_F=500\text{mA}, T_A=100^\circ\text{C}$		411	460	mV
$V_F$	$I_F=1.0\text{A}$		567	620	mV
$V_F$	$I_F=1.0\text{A}, T_A=100^\circ\text{C}$		541	610	mV
$C_J$	$V_R=0, f=1.0\text{MHz}$		147		pF
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$		50		pF

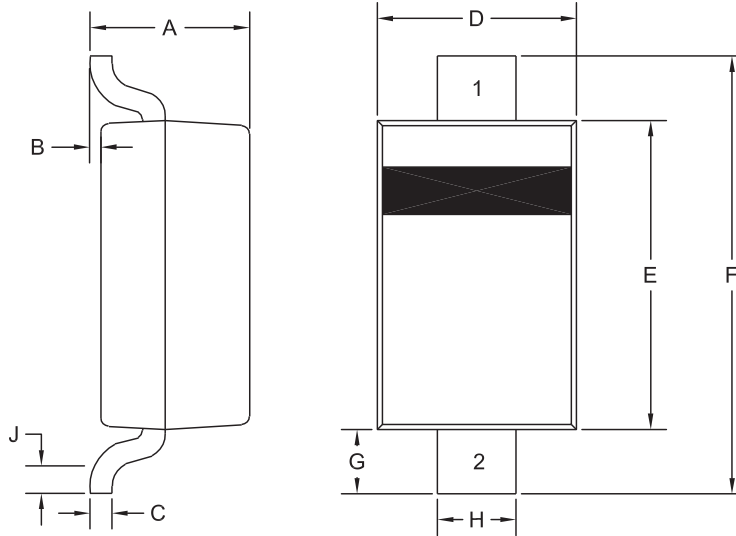
R6 (20-October 2015)

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SOD-123 CASE - MECHANICAL OUTLINE



R5

LEAD CODE

- 1) Cathode
- 2) Anode

MARKING CODE: C54

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.037	0.053	0.95	1.35
B	0.000	0.005	0.00	0.12
C	-	0.008	-	0.20
D	0.055	0.071	1.40	1.80
E	0.098	0.110	2.50	2.80
F	0.142	0.154	3.60	3.90
G	0.016	-	0.40	-
H	0.020	0.028	0.50	0.70
J	0.010	-	0.25	-

SOD-123 (REV:R5)

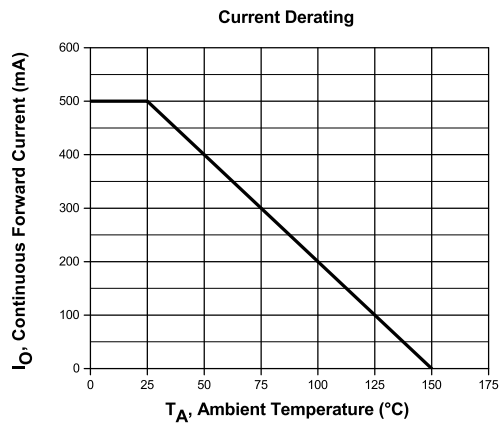
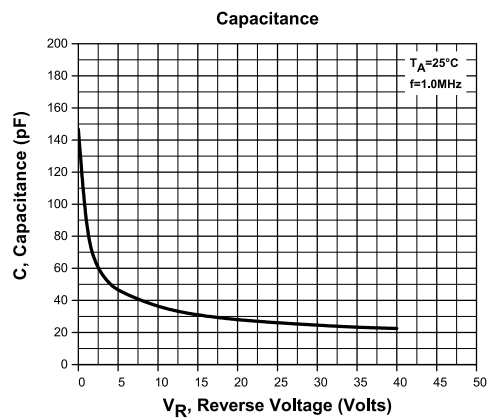
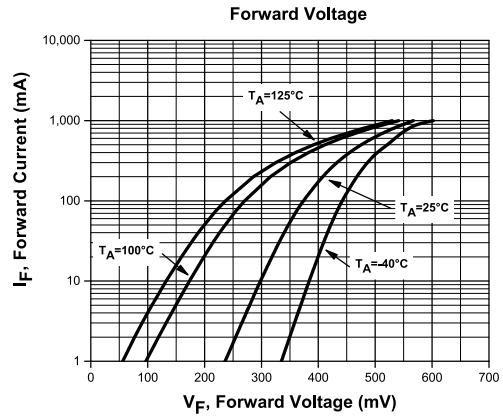
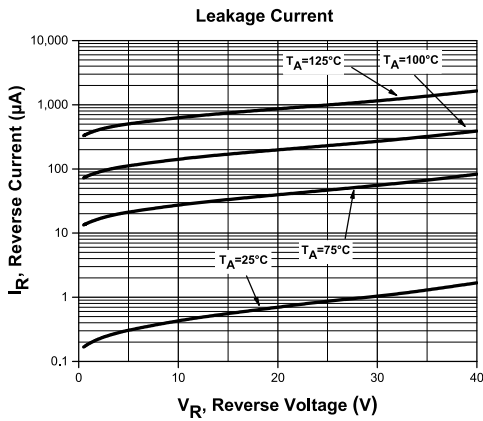
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TYPICAL ELECTRICAL CHARACTERISTICS



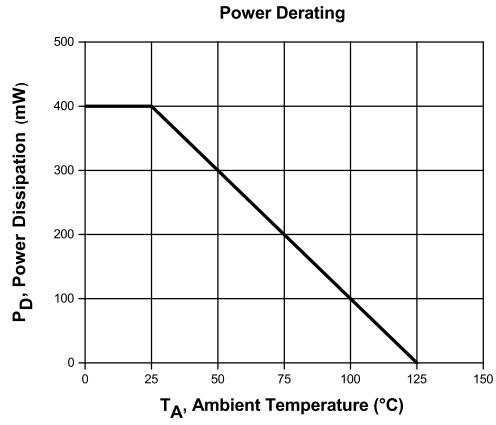
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### TYPICAL ELECTRICAL CHARACTERISTICS



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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

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