CMHSH5-4

SURFACE MOUNT SILICON SCHOTTKY RECTIFIER 500mA, 40 VOLT



SOD-123 CASE

Central Semiconductor Corp.

www.centralsemi.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°C)	**SYMBOL**		**UNITS**
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Peak Working Reverse Voltage	V_{RWM}	40	V
DC Blocking Voltage	V_R	40	V
Average Rectified Current	I_O	500	mA
Peak Repetitive Forward Current (@ rated V_R, square wave, 20kHz, T_C=115°C)	I_{FRM}	1.0	A
Peak Forward Surge Current (@ rated load, halfwave, single phase, 60Hz)	I_{FSM}	5.5	A
Power Dissipation	P_D	400	mW
Operating Junction Temperature	T_J	-65 to +125	°C
Storage Temperature	T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JL}	118	°C/W
Thermal Resistance	Θ_{JA}	250	°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

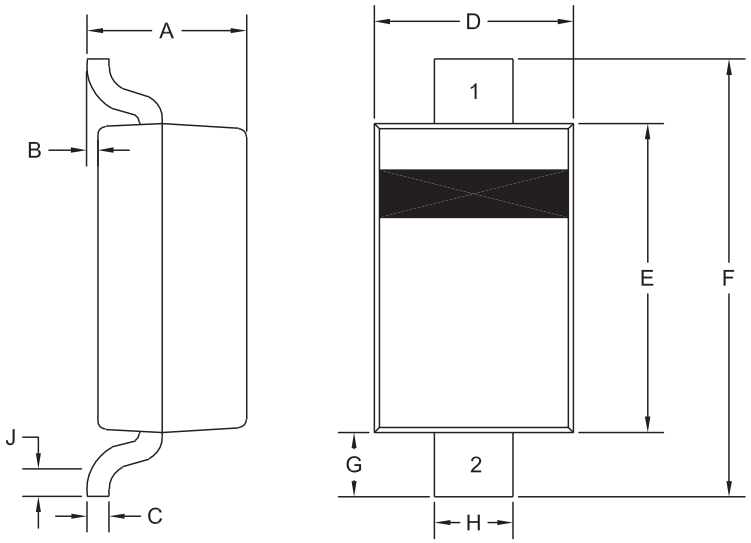
SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**MAX**	**UNITS**
I_R	V_R=20V		0.7	10	μA
I_R	V_R=20V, T_A=100°C		0.2	5.0	mA
I_R	V_R=40V		1.7	20	μA
I_R	V_R=40V, T_A=100°C		0.38	13	mA
BV_R	I_R=10μA	40			V
V_F	I_F=500mA		460	510	mV
V_F	I_F=500mA, T_A=100°C		411	460	mV
V_F	I_F=1.0A		567	620	mV
V_F	I_F=1.0A, T_A=100°C		541	610	mV
C_J	V_R=0, f=1.0MHz		147		pF
C_J	V_R=4.0V, f=1.0MHz		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				
	INCHES		MILLIMETERS	
SYMBOL	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	-

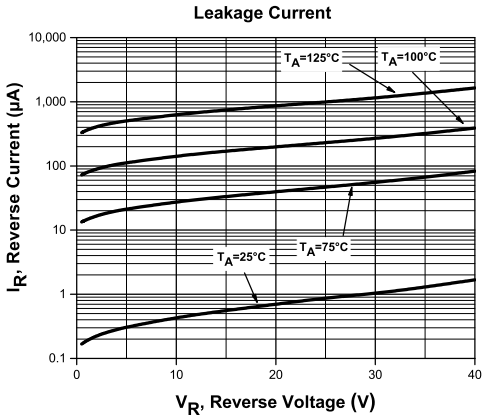
SOD-123 (REV:R5)

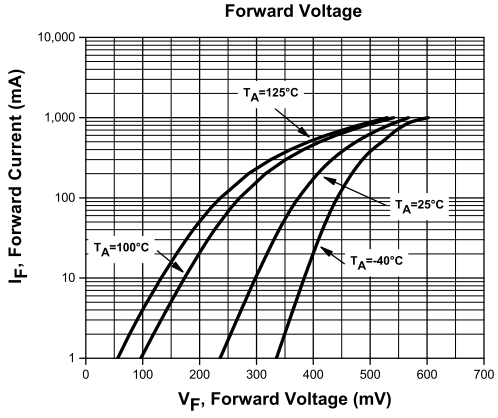
R6 (20-October 2015)

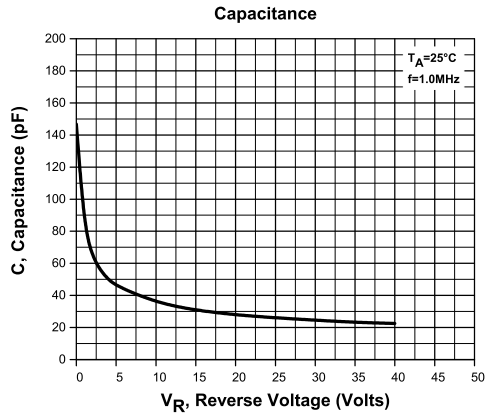
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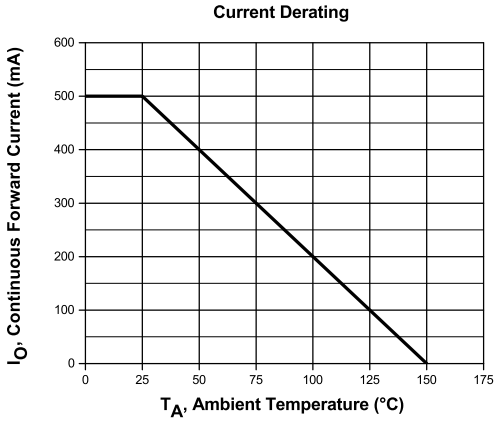
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TYPICAL ELECTRICAL CHARACTERISTICS





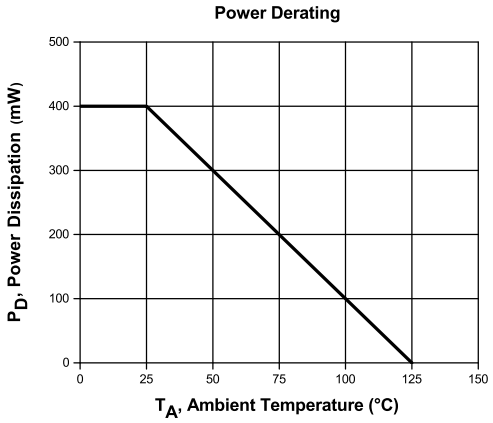




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TYPICAL ELECTRICAL CHARACTERISTICS



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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