

CMHSH5-4 TR PBFREE Datasheet

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DiGi Electronics Part Number	CMHSH5-4 TR PBFREE-DG
Manufacturer	Central Semiconductor Corp
Manufacturer Product Number	CMHSH5-4 TR PBFREE
Description	DIODE SCHOTTKY 40V 500MA SOD123
Detailed Description	Diode 40 V 500mA Surface Mount SOD-123

This model CMHSH5-4 TR PBFREE is available at DiGi Electronics.

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DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

CMHSH5-4 TR PBFREE

Series:

-

Technology:

Schottky

Current - Average Rectified (Io):

500mA

Speed:

Fast Recovery =< 500ns, > 200mA (Io)

Capacitance @ Vr, F:

50pF @ 4V, 1MHz

Package / Case:

SOD-123

Operating Temperature - Junction:

-65°C ~ 125°C

Manufacturer:

Central Semiconductor Corp

Product Status:

Active

Voltage - DC Reverse (Vr) (Max):

40 V

Voltage - Forward (Vf) (Max) @ If:

620 mV @ 1 A

Current - Reverse Leakage @ Vr:

20 µA @ 40 V

Mounting Type:

Surface Mount

Supplier Device Package:

SOD-123

Base Product Number:

CMHSH5

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.10.0070

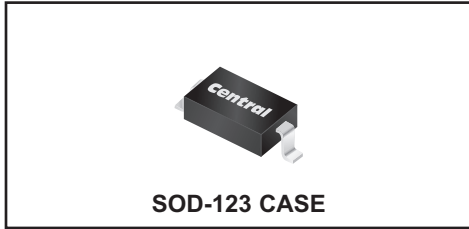
Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

CMHSH5-4
SURFACE MOUNT SILICON
SCHOTTKY RECTIFIER
500mA, 40 VOLT



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°C)

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

SYMBOL

V _{RRM}	40
V _{RWM}	40
V _R	40
I _O	500
I _{FRM}	1.0
I _{FSM}	5.5
P _D	400
T _J	-65 to +125
T _{stg}	-65 to +150
θ _{JL}	118
θ _{JA}	250

UNITS

V
V
V
mA
A
A
mW
°C
°C
°C/W
°C/W

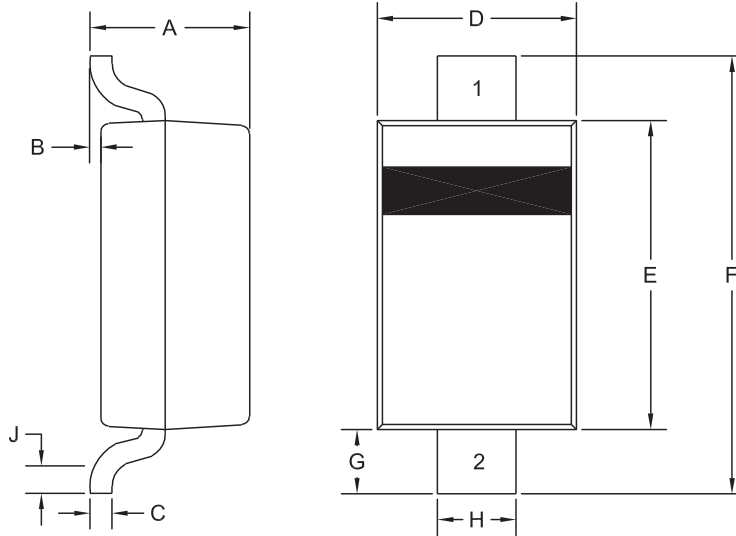
ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

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



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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	-

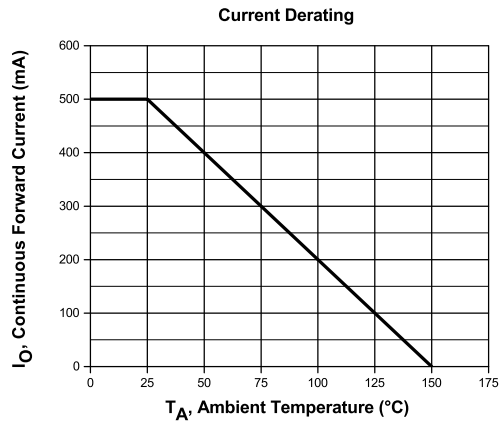
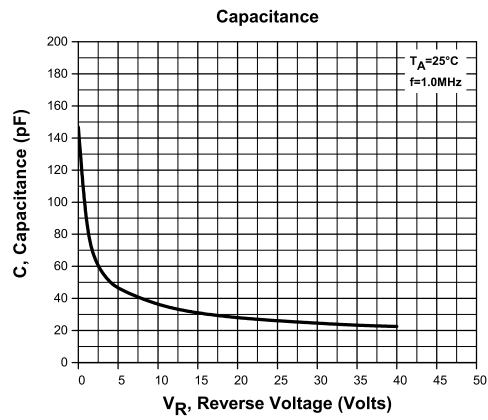
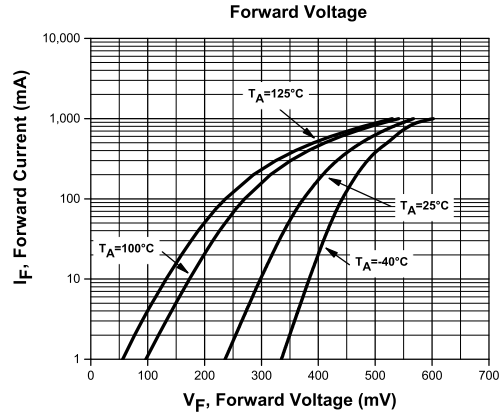
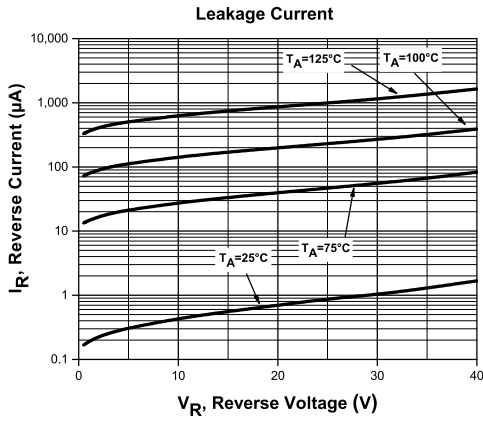
SOD-123 (REV:R5)

R6 (20-October 2015)

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SURFACE MOUNT SILICON
SCHOTTKY RECTIFIER
500mA, 40 VOLT



TYPICAL ELECTRICAL CHARACTERISTICS

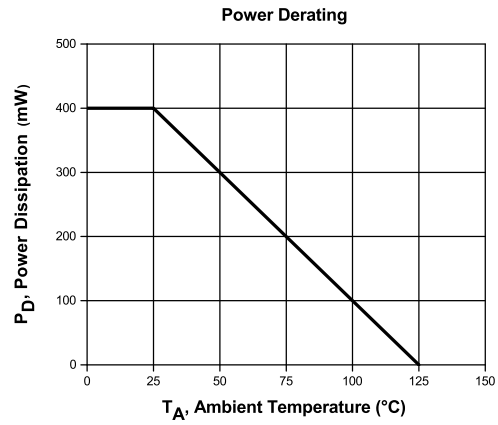


R6 (20-October 2015)

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TYPICAL ELECTRICAL CHARACTERISTICS



R6 (20-October 2015)



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

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
 145 Adams Avenue
 Hauppauge, NY 11788 USA
 Main Tel: (631) 435-1110
 Main Fax: (631) 435-1824
 Support Team Fax: (631) 435-3388
www.centrasemi.com

Worldwide Field Representatives:
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