

CMFSH-3i

SURFACE MOUNT SILICON
DUAL, ISOLATED
SCHOTTKY DIODE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMFSH-3i consists of two electrically isolated silicon Schottky diodes packaged in an epoxy molded SOT-143 surface mount case. This device is designed fast switching applications requiring a low forward voltage drop.

MARKING CODE: C3I



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

Peak Repetitive Reverse Voltage
Continuous Forward Current
Peak Repetitive Forward Current
Peak Forward Surge Current, $t_p=10\text{ms}$
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V_{RRM}	30
I_F	100
I_{FRM}	200
I_{FSM}	750
P_D	350
T_J, T_{stg}	-65 to +150
θ_{JA}	357

UNITS

V
mA
mA
mA
mW
$^{\circ}\text{C}$
$^{\circ}\text{C/W}$

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

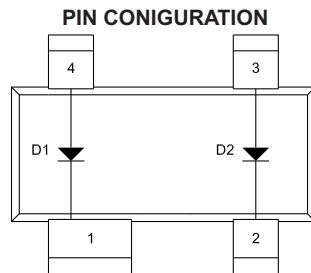
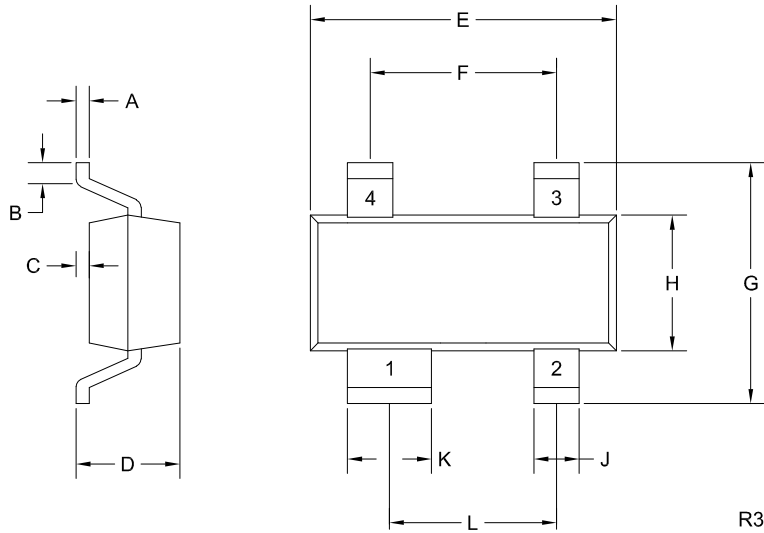
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=25\text{V}$		90	500	nA
I_R	$V_R=25\text{V}, T_A=100^{\circ}\text{C}$		25	100	μA
BV_R	$I_R=100\mu\text{A}$	30			V
V_F	$I_F=2.0\text{mA}$		0.29	0.33	V
V_F	$I_F=15\text{mA}$		0.37	0.45	V
V_F	$I_F=100\text{mA}$		0.51	1.00	V
C_J	$V_R=1.0\text{V}, f=1.0\text{MHz}$		7.0		pF
t_{rr}	$I_F=I_R=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$			5.0	ns

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SOT-143 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

MARKING CODE: C3I

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.008	0.08	0.20
B	0.006	-	0.15	-
C	0.000	0.005	0.01	0.13
D	0.035	0.045	0.89	1.14
E	0.110	0.120	2.79	3.04
F	0.075		1.90	
G	0.083	0.102	2.10	2.60
H	0.047	0.055	1.19	1.40
J	0.012	0.020	0.30	0.50
K	0.030	0.037	0.76	0.93
L	0.067		1.70	

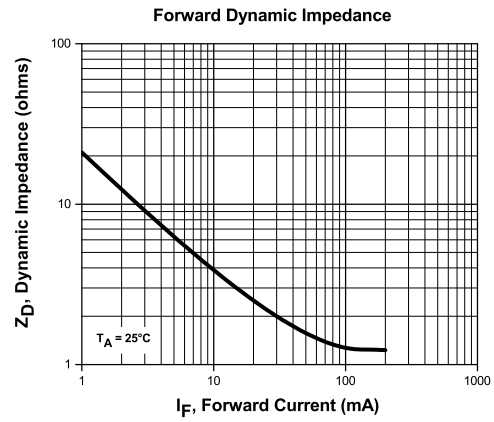
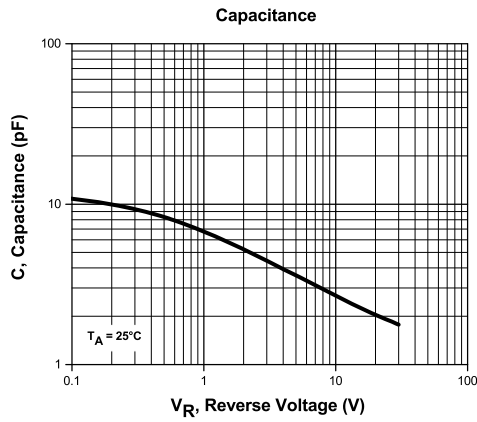
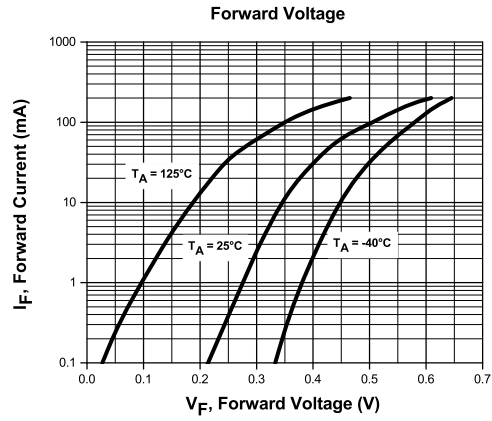
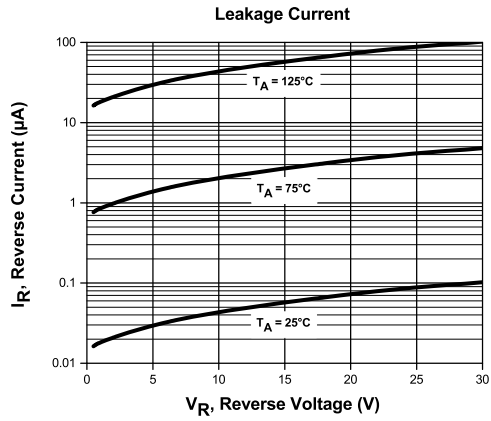
SOT-143 (REV: R3)

R7 (19-September 2018)

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TYPICAL ELECTRICAL CHARACTERISTICS



R7 (19-September 2018)

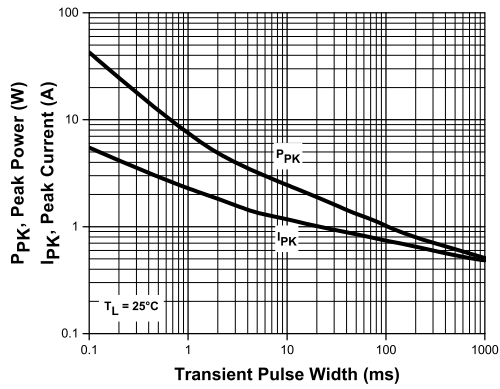
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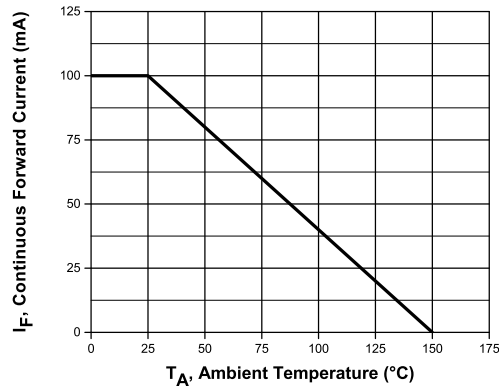


TYPICAL ELECTRICAL CHARACTERISTICS

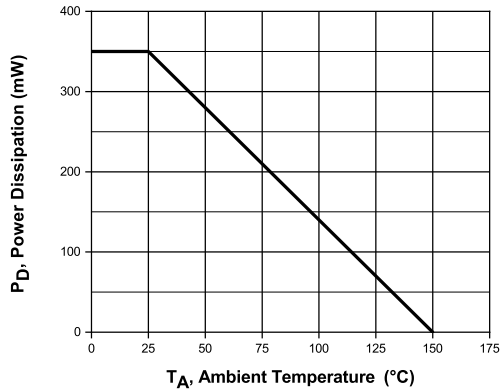
Transient Peak Power and Peak Current Capacity



Current Derating



Power Derating



R7 (19-September 2018)

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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For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms

Product End of Life Notification

PDN ID:	PDN01220 Rev:001
Notification Date:	2/09/23
Last Buy Date:	N/A
Last Shipment Date	N/A

Summary: All devices manufactured in the SOT-143 package are discontinued and now classified as End of Life (EOL). Rev:001 of PDN#01220, Feb 9, 2023, issued to remove BAW100G BK and BAW100G TR to address market demand; BAW100G BK and BAW100G TR are now active devices.

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Portfolio Management. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

*** All Plating types (PBFREE, TIN/LEAD) for each item listed are included in this notice.**

Central Part Number	Suggested Replacement
BAS28 BK	N/A
BAS28 TR	N/A
BAW100 BK	N/A
BAW100 TR	N/A
CMFSH-3I BK	N/A
CMFSH-3I TR	N/A
BAW100G BK	Item BAW100G BK removed from PDN; device now active.
BAW100G TR	Item BAW100G TR removed from PDN; device now active.

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. If you would like assistance, please visit <https://my.centralsemi.com/submit-inquiry?type=ER> to submit an online inquiry.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.