### CMFD2004i

## SURFACE MOUNT SILICON DUAL ISOLATED HIGH VOLTAGE SWITCHING DIODES

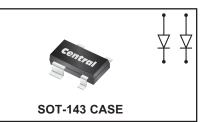


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## **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMFD2004i consists of two electrically Isolated high voltage switching diodes packaged in an epoxy molded SOT-143 surface mount case. This device is designed for switching applications requiring dual high voltage diodes.

MARKING CODE: CJP



MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Continuous Reverse Voltage	$V_{R}$	240	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	300	V
Peak Repetitive Reverse Current	IO	200	mA
Continuous Forward Current	Ι <sub>F</sub>	225	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	450	mA
Peak Forward Surge Current, tp=1.0µs	I <sub>FSM</sub>	4.0	Α
Peak Forward Surge Current, tp=1.0s	<sup>I</sup> FSM	1.0	Α
Power Dissipation	$P_{D}$	350	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	$\Theta_{JA}$	357	°C/W

## ELECTRICAL CHARACTERISTICS PER DIODE: (T<sub>A</sub>=25°C unless otherwise noted) SYMBOL TEST CONDITIONS MIN MAX ID Vp=240V 100

$I_{R}$	V <sub>R</sub> =240V		100	nA
$I_{R}$	V <sub>R</sub> =240V, T <sub>A</sub> =150°C		100	μΑ
$BV_R$	I <sub>R</sub> =100μA	300		V
$V_{F}$	I <sub>F</sub> =100mA		1.0	V
CJ	$V_R=0$ , $f=1.0MHz$		5.0	pF
t <sub>rr</sub>	$I_F=I_R=30$ mA, $I_{rr}=3.0$ mA, $R_L=100\Omega$		50	ns

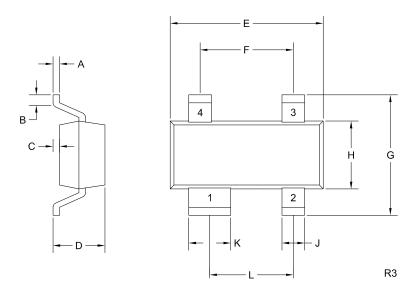
UNITS

### CMFD2004i

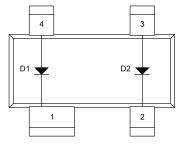
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### **SOT-143 CASE - MECHANICAL OUTLINE**



## **PIN CONIGURATION**



## LEAD CODE:

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

MARKING CODE: CJP

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
Α	0.003	0.008	0.08	0.20
В	0.006	-	0.15	-
С	0.000	0.005	0.01	0.13
D	0.035	0.045	0.89	1.14
Е	0.110	0.120	2.79	3.04
F	0.075		1.90	
G	0.083	0.102	2.10	2.60
Н	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-1/3 (REV/- R3)				

SOT-143 (REV: R3)

R6 (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 guick 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

#### 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

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# Product End of Life Notification

PDN ID:	PDN01140
Notification Date:	12/17/19
Last Buy Date:	6/17/20
Last Shipment Date	12/17/20

Summary: The CMFD2004I high voltage diode is discontinued and now classified as End of Life (EOL).

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 Management Process. 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.

Central Part Number	<u>Replacement</u>	
CMFD2004I BK	N/A, Stock Only	
CMFD2004I TR	N/A, Stock Only	

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. Please email your requests to engineering@centralsemi.com.

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.

CCC785 REV 002