### CMFD2004i

# SURFACE MOUNT SILICON DUAL ISOLATED HIGH VOLTAGE SWITCHING DIODES



www.centralsemi.com

# **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	lF	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	I <sub>FSM</sub>	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	$\Theta_{\sf JA}$	357	°C/W

<b>ELECTRICAL CHARACTERISTICS PER DIODE:</b> (T <sub>A</sub> =25°C unless otherwise noted)				
SYMBOL	TEST CONDITIONS	MIN	MAX	
$I_R$	V <sub>R</sub> =240V		100	
$I_R$	V <sub>R</sub> =240V, T <sub>A</sub> =150°C		100	

11	11			
$I_{R}$	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 <sub>R</sub> =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

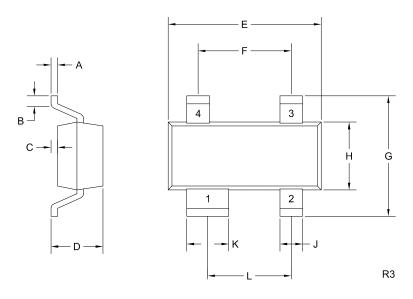
UNITS nA

### CMFD2004i

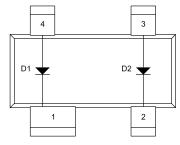
# SURFACE MOUNT SILICON DUAL ISOLATED HIGH VOLTAGE SWITCHING DIODES



#### **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-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

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.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

**Worldwide Distributors:** 

www.centralsemi.com/wwdistributors

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: <a href="https://www.centralsemi.com/terms">www.centralsemi.com/terms</a>

www.centralsemi.com (001)

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Central Semiconductor:

CMFD2004I TR CMFD2004I BK