

CMYD4448

**SURFACE MOUNT SILICON  
DUAL, ISOLATED  
HIGH SPEED  
SWITCHING DIODE**



**SOT-543 CASE**



[www.centralemi.com](http://www.centralemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMYD4448 contains two (2) isolated configuration silicon switching diodes, manufactured by the epitaxial planar process, epoxy molded in an SOT-543 surface mount package. This device is designed for high speed switching applications.

**MARKING CODE: C48**

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

Peak Repetitive Reverse Voltage
Continuous Forward Current
Peak Repetitive Forward Current
Peak Forward Surge Current, $t_p=1.0\mu\text{s}$
Peak Forward Surge Current, $t_p=1.0\text{s}$
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

**SYMBOL**

$V_{RRM}$	120
$I_F$	250
$I_{FRM}$	500
$I_{FSM}$	4.0
$I_{FSM}$	1.0
$P_D$	250
$T_J, T_{stg}$	-65 to +150
$\theta_{JA}$	500

**UNITS**

V
mA
mA
A
A
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
$I_R$	$V_R=50\text{V}$			300	nA
$I_R$	$V_R=50\text{V}, T_A=125^{\circ}\text{C}$			100	$\mu\text{A}$
$I_R$	$V_R=100\text{V}$			500	nA
$BV_R$	$I_R=100\mu\text{A}$	120	150		V
$V_F$	$I_F=1.0\text{mA}$	0.55	0.59	0.65	V
$V_F$	$I_F=10\text{mA}$	0.67	0.72	0.77	V
$V_F$	$I_F=100\text{mA}$	0.85	0.91	1.0	V
$C_J$	$V_R=0, f=1.0\text{MHz}$			1.5	pF
$t_{rr}$	$I_R=I_F=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$		2.0	4.0	ns

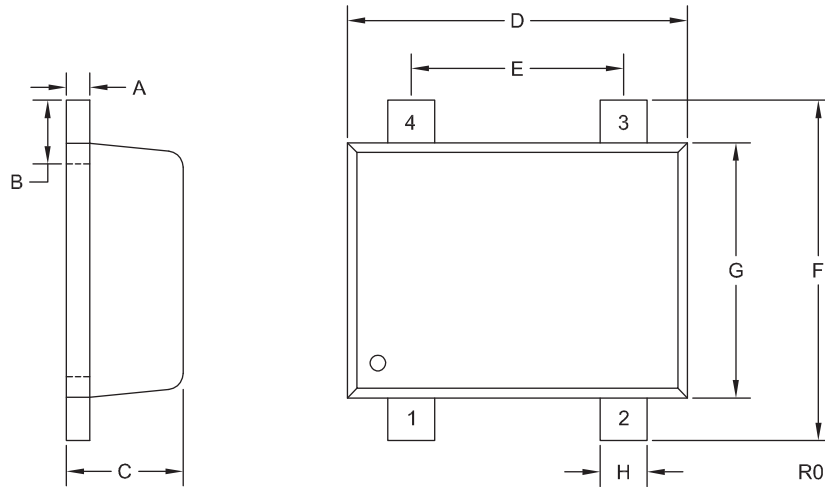
R2 (19-June 2019)

CMYD4448

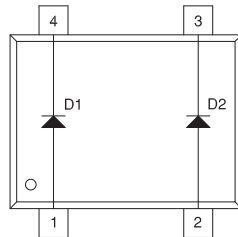
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SOT-543 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:

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

MARKING CODE: C48

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.002	0.007	0.07	0.17
B	0.004	0.012	0.10	0.30
C	0.019	0.024	0.50	0.60
D	0.059	0.067	1.50	1.70
E	0.035	0.044	0.90	1.10
F	0.059	0.067	1.50	1.70
G	0.044	0.052	1.10	1.30
H	0.006	0.011	0.17	0.27

SOT-543 (REV: R0)

R2 (19-June 2019)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick 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

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### 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).

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### CONTACT US

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