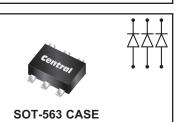
### SURFACE MOUNT SILICON TRIPLE ISOLATED LOW V<sub>F</sub> SCHOTTKY DIODE



 $\bullet$  Device is  $\it Halogen\ Free$  by design

www.centralsemi.com

#### **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMLSH2-4T consists of three (3) isolated silicon Schottky diodes, manufactured in an SOT-563 surface mount package. This device is designed for switching applications requiring a low forward voltage drop.

**MARKING CODE: CT4** 

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
Continuous Forward Current	I <sub>F</sub>	200	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	300	mA
Peak Forward Surge Current, tp=10ms	I <sub>FSM</sub>	600	mA
Power Dissipation (Note 1)	$P_{D}$	350	mW
Power Dissipation (Note 2)	$P_{D}$	300	mW
Power Dissipation (Note 3)	$P_{D}$	150	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance (Note 1)	$\Theta_{\sf JA}$	357	°C/W

# ELECTRICAL CHARACTERISTICS PER DIODE: (TA=25°C unless otherwise noted)

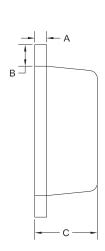
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
$I_{R}$	V <sub>R</sub> =25V		100	500	nA
$BV_R$	I <sub>R</sub> =100μA	40	55		V
VF	I <sub>F</sub> =100μA		0.24	0.26	V
VF	I <sub>F</sub> =500μA		0.29	0.31	V
$V_{F}$	I <sub>F</sub> =1.0mA		0.31	0.33	V
VF	I <sub>F</sub> =50mA		0.54	0.60	V
VF	I <sub>F</sub> =100mA		0.67	0.75	V
CJ	V <sub>R</sub> =1.0V, f=1.0MHz			10	pF
t <sub>rr</sub>	$I_F = I_R = 10$ mA, $I_{rr} = 1.0$ mA, $R_L = 100$ Ω			5.0	ns

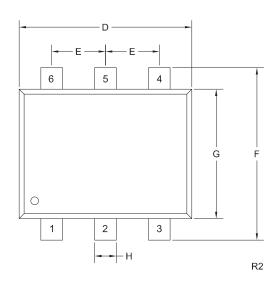
Notes: (1) Ceramic or aluminum core PC Board with copper mounting pad area of 4.0mm² (2) FR-4 Epoxy PC Board with copper mounting pad area of 4.0mm² (3) FR-4 Epoxy PC Board with copper mounting pad area of 1.4mm²

# SURFACE MOUNT SILICON TRIPLE ISOLATED LOW $V_F$ SCHOTTKY DIODE

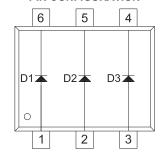


# **SOT-563 CASE - MECHANICAL OUTLINE**





#### **PIN CONFIGURATION**



DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.0027	0.007	0.07	0.18			
В	0.008		0.20				
С	0.017	0.024	0.45	0.60			
D	0.059	0.067	1.50	1.70			
E	0.020		0.50				
F	0.059	0.067	1.50	1.70			
G	0.043	0.051	1.10	1.30			
Н	0.006	0.012	0.15	0.30			
SOT-563 (REV: R2)							

# LEAD CODE:

- 1) Anode D1
- 2) Anode D2
- 3) Anode D3
- 4) Cathode D3
- 5) Cathode D2
- 6) Cathode D1

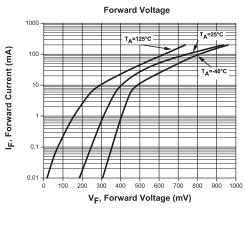
MARKING CODE: CT4

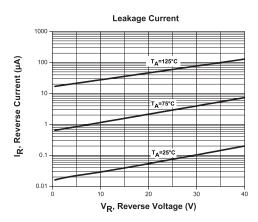
R5 (1-July 2015)

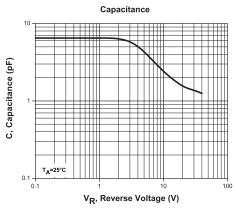


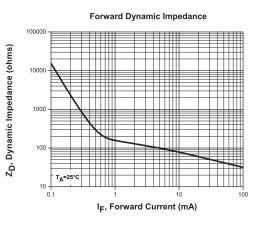


#### TYPICAL ELECTRICAL CHARACTERISTICS













#### **SERVICES**

- · Bonded Inventory
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- · Bare Die Available for Hybrid Applications

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R5 (1-July 2015)