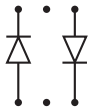
CMRSH-4DO

SURFACE MOUNT
DUAL, ISOLATED, OPPOSING
SILICON SCHOTTKY DIODES

ATTOmini™



SOT-963 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION: The CENTRAL SEMICONDUCTOR CMRSH-4DO are Dual, Isolated, Opposing high quality Schottky Diodes designed for applications where very small size and operational efficiency are prime requirements.

MARKING CODE: CV

APPLICATIONS:
- DC/DC Converters
- Voltage Clamping
- Protection Circuits
- Battery Charging Circuits

FEATURES:
- Current (I_O=200mA)
- Low Forward Voltage Drop (V_F=0.35V TYP @ 1.0mA)
- Low Reverse Current (25nA TYP @ 30V)
- Extremely Fast Switching (5.0ns MAX)
- Small 1.0 x 1.0 x 0.5mm SOT-963 ATTOmini™ Surface Mount Package
- Versatile multi-configurable device

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Average Forward Current	I_O	200	mA
Peak Forward Surge Current, tp=8.3ms	I_{FSM}	600	mA
Power Dissipation	P_D	125	mW
Operating Junction Temperature	T_J	-65 to +125	°C
Storage Temperature	T_{stg}	-65 to +150	°C
Thermal Resistance	Θ_{JA}	800	°C/W

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

SYMBOL	**TEST CONDITIONS**	**MIN**	**TYP**	**MAX**	**UNITS**
I_R	V_R=30V		25	200	nA
BV_R	I_R=10μA	40			V
V_F	I_F=1.0mA		0.35	0.38	V
V_F	I_F=15mA		0.55	0.65	V
V_F	I_F=40mA		0.77	1.00	V
C_T	V_R=0, f=1.0MHz			5.0	pF
t_{rr}	I_F=I_R=10mA, I_{rr}=1.0mA, R_L=100Ω			5.0	ns

R1 (9-June 2010)

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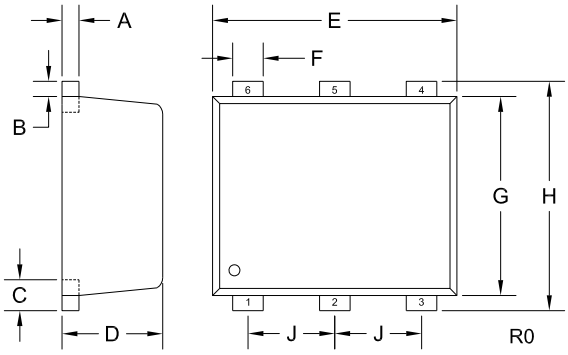
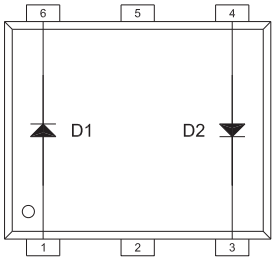
SOT-963 CASE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.002	0.006	0.050	0.150
B	0.002	0.006	0.050	0.150
C	0.005	0.007	0.125	0.175
D	0.016	0.020	0.400	0.500
E	0.037	0.041	0.950	1.050
F	0.004	0.008	0.100	0.200
G	0.030	0.033	0.750	0.850
H	0.037	0.041	0.950	1.050
J	0.014		0.350	

SOT-963 (REV: R0)

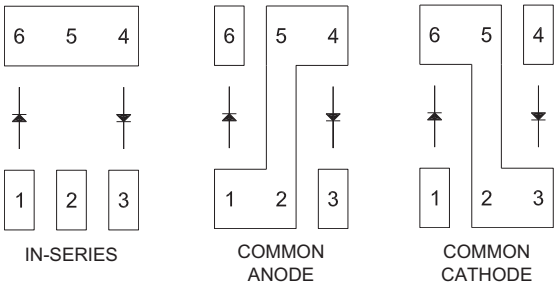
PIN CONFIGURATION



LEAD CODE:
1) Anode D1
2) NC
3) Cathode D2
4) Anode D2
5) NC
6) Cathode D1

MARKING CODE: CV

SUGGESTED MOUNTING PAD CONFIGURATIONS



Note:
Two devices easily configurable as a bridge rectifier.

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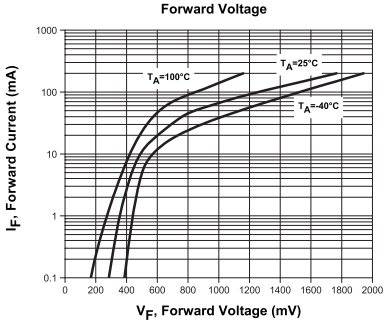
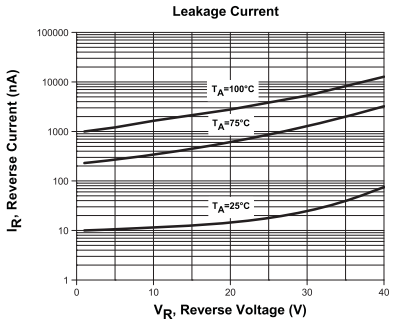
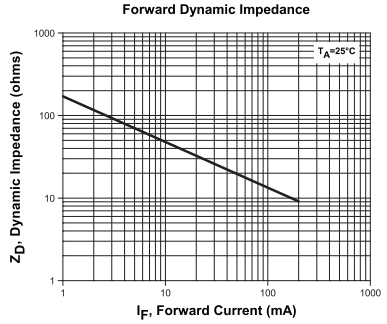
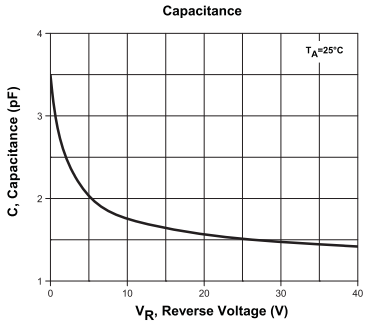
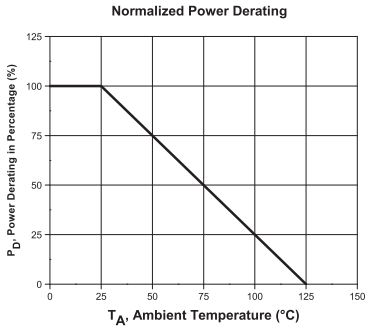
TYPICAL ELECTRICAL CHARACTERISTICS











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