

CTLSH4-200M364

SURFACE MOUNT SILICON  
LOW  $V_F$   
SCHOTTKY RECTIFIER

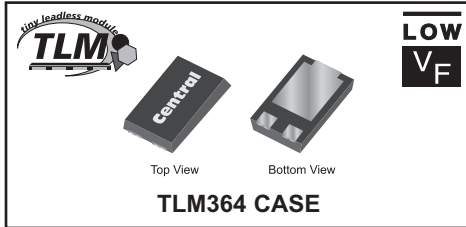


www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CTLSH4-200M364 is a high performance 4.0 Amp silicon Schottky rectifier designed for applications requiring high voltage capability and high levels of efficiency in a low profile package.

**MARKING CODE: CTLSH420**



**APPLICATIONS:**

- DC-DC converters
- Reverse polarity protection
- By-pass diode

**FEATURES:**

- Low forward voltage
- Low reverse leakage current
- Low profile package

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

Peak Repetitive Reverse Voltage  
DC Blocking Voltage  
RMS Reverse Voltage  
Average Forward Current ( $T_L=125^\circ\text{C}$ )  
Peak Forward Surge Current,  $t_p=8.3\text{ms}$   
Operating and Storage Junction Temperature  
Thermal Resistance (Note 1)  
Thermal Resistance

SYMBOL		UNITS
$V_{RRM}$	200	V
$V_R$	200	V
$V_{R(RMS)}$	140	V
$I_O$	4.0	A
$I_{FSM}$	100	A
$T_J, T_{stg}$	-55 to +150	$^\circ\text{C}$
$\Theta_{JA}$	80	$^\circ\text{C/W}$
$\Theta_{JL}$	15	$^\circ\text{C/W}$

**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

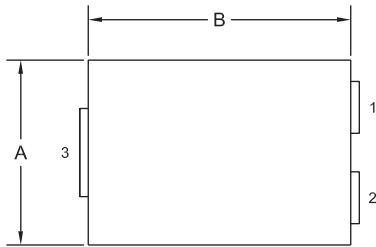
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=200\text{V}$		0.15	1.0	$\mu\text{A}$
$I_R$	$V_R=200\text{V}, T_A=125^\circ\text{C}$		0.35	10	mA
$BV_R$	$I_R=500\mu\text{A}$	200			V
$V_F$	$I_F=4.0\text{A}$		0.76	0.84	V
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$		140		pF

Notes: (1) FR-4 epoxy PCB with minimum copper pad area.

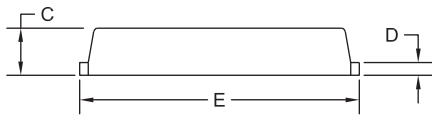
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**SCHOTTKY RECTIFIER**



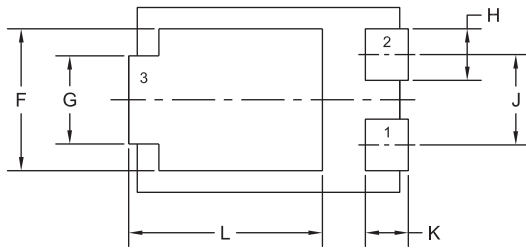
**TLM364 CASE - MECHANICAL OUTLINE**



TOP VIEW



SIDE VIEW

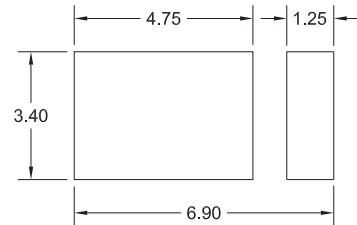


BOTTOM VIEW R0

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.167	0.172	4.25	4.35
B	0.238	0.243	6.05	6.15
C	0.039	0.048	1.00	1.20
D	0.009	0.014	0.25	0.35
E	0.250	0.262	6.35	6.65
F	0.128	0.136	3.25	3.45
G	0.076	0.085	1.95	2.15
H	0.044	0.052	1.10	1.30
J	0.083		2.10	
K	0.035	0.044	0.90	1.10
L	0.171	0.183	4.35	4.65

TLM364 (REV:R0)

**SUGGESTED MOUNTING PADS**  
(Dimensions in mm)



R0

**LEAD CODE:**

- 1) Anode
- 2) Anode
- 3) Cathode

**MARKING CODE: CTLSH420**

R1 (4-January 2013)

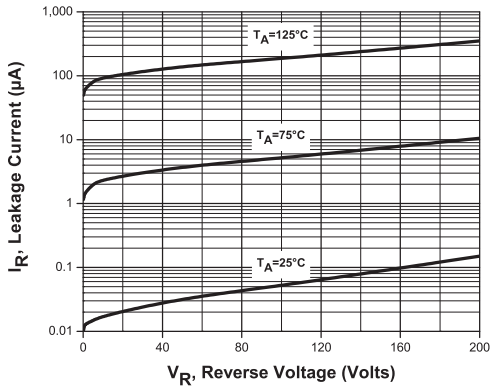
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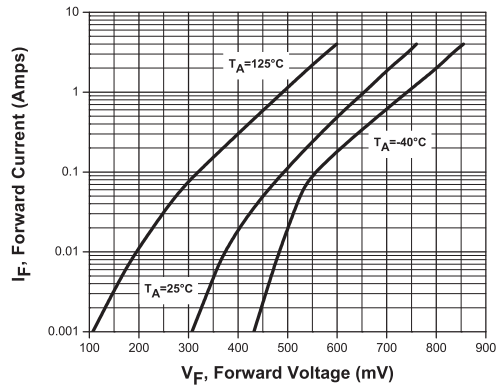


### TYPICAL ELECTRICAL CHARACTERISTICS

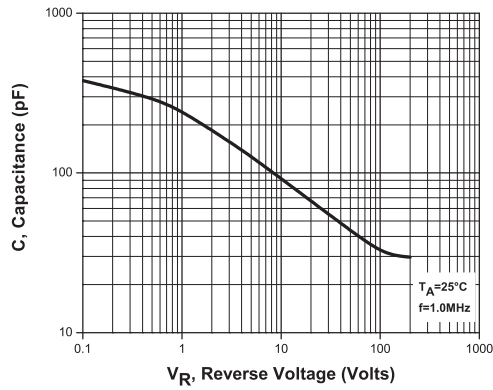
Typical Leakage Characteristics



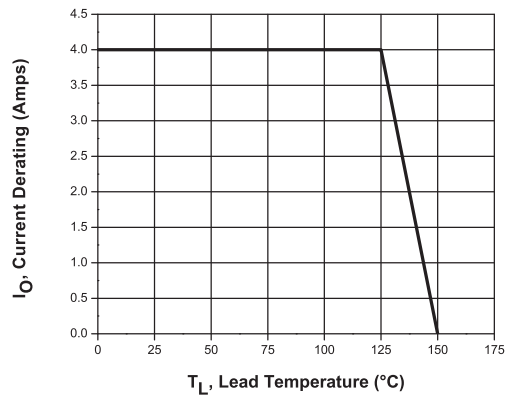
Typical Forward Voltage



Typical Capacitance



Current Derating



R1 (4-January 2013)

## 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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