

CTLSH4-200M364

SURFACE MOUNT SILICON
LOW V_F
SCHOTTKY RECTIFIER

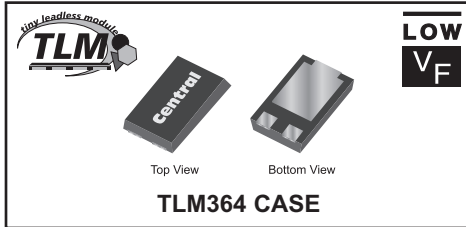


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DESCRIPTION:

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 | $^\circ\text{C}$ |
| Θ_{JA} | 80 | $^\circ\text{C/W}$ |
| Θ_{JL} | 15 | $^\circ\text{C/W}$ |

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

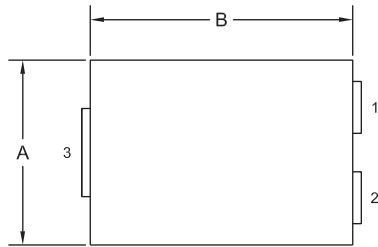
| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|--------|--|-----|------|------|---------------|
| I_R | $V_R=200\text{V}$ | | 0.15 | 1.0 | μA |
| I_R | $V_R=200\text{V}, T_A=125^\circ\text{C}$ | | 0.35 | 10 | mA |
| BV_R | $I_R=500\mu\text{A}$ | 200 | | | V |
| V_F | $I_F=4.0\text{A}$ | | 0.76 | 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.

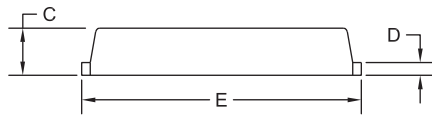
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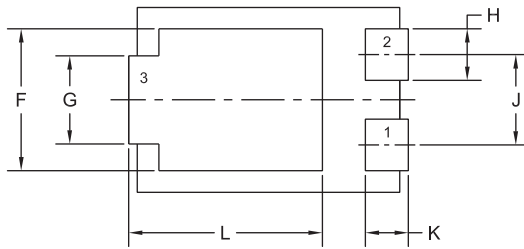
TLM364 CASE - MECHANICAL OUTLINE



TOP VIEW



SIDE VIEW

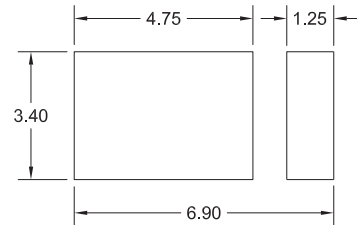


BOTTOM VIEW R0

| 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)

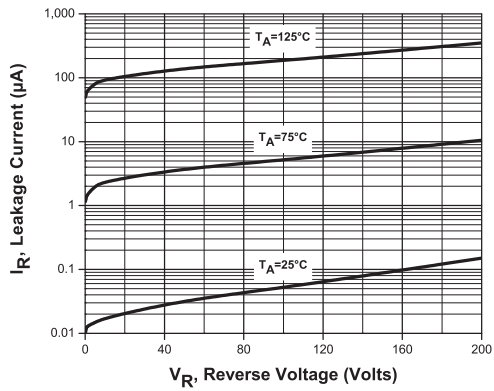
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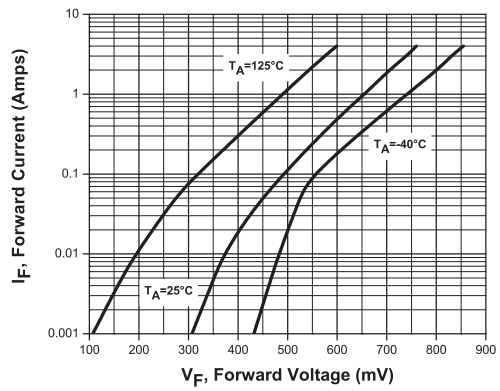


TYPICAL ELECTRICAL CHARACTERISTICS

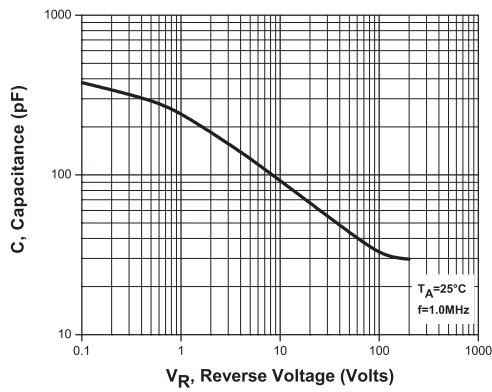
Typical Leakage Characteristics



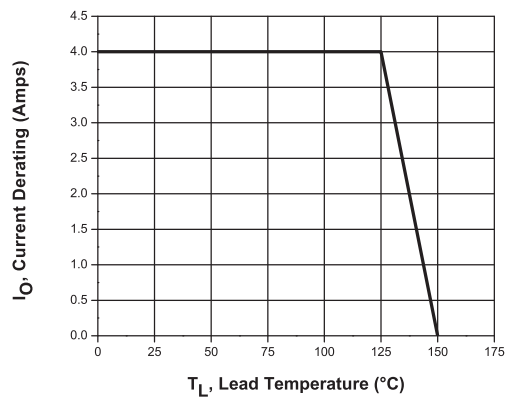
Typical Forward Voltage



Typical Capacitance



Current Derating



R1 (4-January 2013)

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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

DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2nd 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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