

CTLSH4-200M364

**SURFACE MOUNT SILICON
LOW V_F
SCHOTTKY RECTIFIER**



www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CTLH4-200M364 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: CTLH420



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°C)

Peak Repetitive Reverse Voltage

| 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 | °C |
| Θ _{JA} | 80 | °C/W |
| Θ _{JL} | 15 | °C/W |

DC Blocking Voltage

RMS Reverse Voltage

Average Forward Current (T_L=125°C)

Peak Forward Surge Current, t_p=8.3ms

Operating and Storage Junction Temperature

Thermal Resistance (Note 1)

Thermal Resistance

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

| SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNITS |
|-----------------|---|-----|------|------|-------|
| I _R | V _R =200V | | 0.15 | 1.0 | µA |
| I _R | V _R =200V, T _A =125°C | | 0.35 | 10 | mA |
| BV _R | I _R =500µA | 200 | | | V |
| V _F | I _F =4.0A | | 0.76 | 0.84 | V |
| C _J | V _R =4.0V, f=1.0MHz | | 140 | | pF |

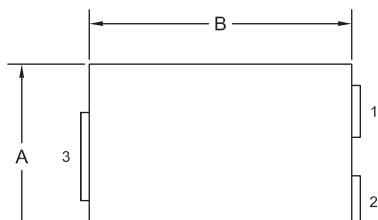
Notes: (1) FR-4 epoxy PCB with minimum copper pad area.

CTLSH4-200M364

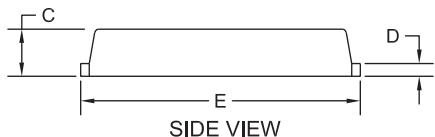
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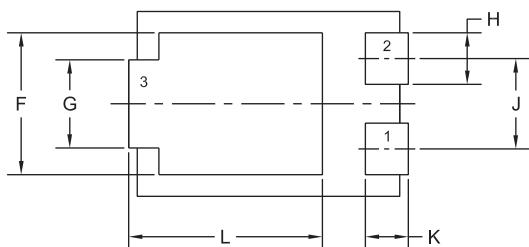
TLM364 CASE - MECHANICAL OUTLINE



TOP VIEW



SIDE VIEW

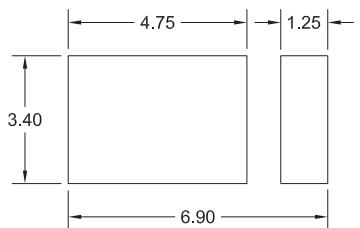


BOTTOM VIEW

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

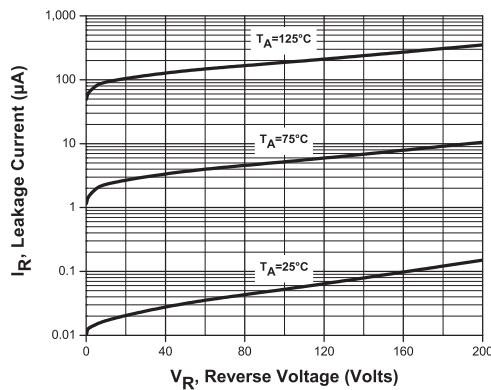
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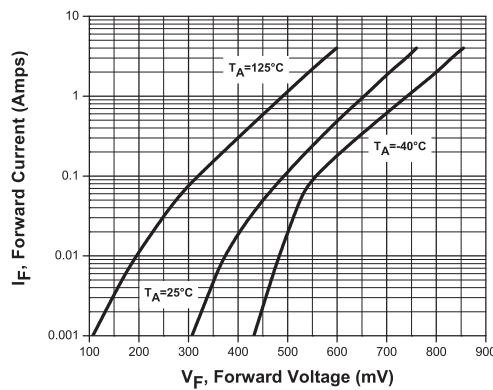


TYPICAL ELECTRICAL CHARACTERISTICS

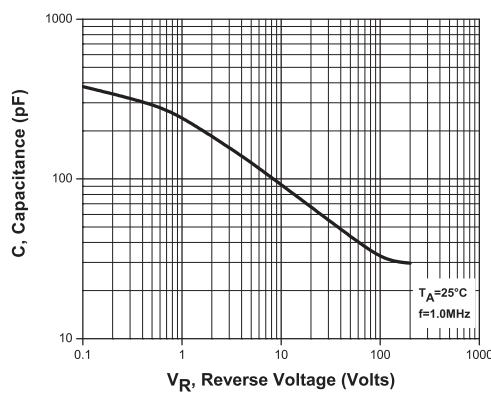
Typical Leakage Characteristics



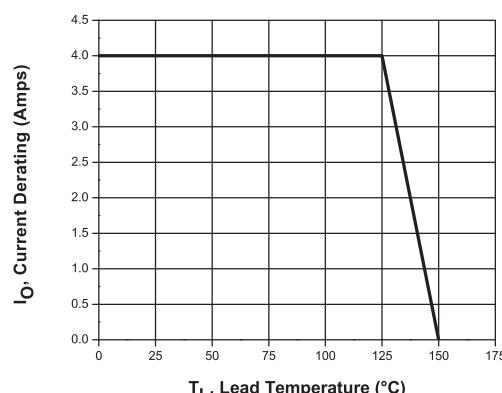
Typical Forward Voltage



Typical Capacitance



Current Derating



R1 (4-January 2013)