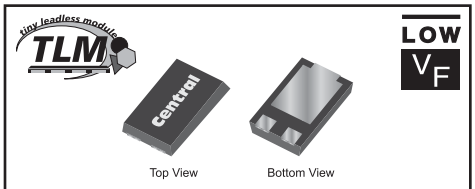
**CTLSH8-60M364**

**SURFACE MOUNT**
**LOW $V_F$**
**SILICON SCHOTTKY RECTIFIER**




**TLM364 CASE**

• Device is ***Halogen Free*** by design

Central Semiconductor Corp.

www.centralsemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CTLSH8-60M364 is a high performance 8.0 amp silicon Schottky rectifier designed for applications as a by-pass diode in low profile solar panels.

**MARKING CODE: CTLSH86**

**APPLICATIONS:**

- Solar by-pass diode
- OR-ing diode
- DC-DC output rectification
- Reverse polarity protection
- Power management

**FEATURES:**

- Low forward voltage, $V_F$=0.54V MAX @ 8.0A
- Low reverse leakage current, $I_R$=0.6mA MAX @ 60V
- Low profile 1.2mm MAX package height

| **MAXIMUM RATINGS:** ($T_A$=25°C) | **SYMBOL** | | **UNITS** |
|---|---|---|---|
| Peak Repetitive Reverse Voltage | $V_{RRM}$ | 60 | V |
| DC Blocking Voltage | $V_R$ | 60 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 42 | V |
| Average Forward Current ($T_L$=125°C) | $I_O$ | 8.0 | A |
| Peak Forward Surge Current, tp=8.3ms | $I_{FSM}$ | 280 | A |
| Operating and Storage Junction Temperature | $T_J$, $T_{stg}$ | -55 to +150 | °C |
| Thermal Resistance | $\Theta_{JA}$ | 60 | °C/W |
| Thermal Resistance | $\Theta_{JL}$ | 7.0 | °C/W |

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

| **SYMBOL** | **TEST CONDITIONS** | **MIN** | **TYP** | **MAX** | **UNITS** |
|---|---|---|---|---|---|
| $I_R$ | $V_R$=60V | | 0.1 | 0.6 | mA |
| $I_R$ | $V_R$=60V, $T_A$=125°C | | 18 | | mA |
| $BV_R$ | $I_R$=1.0mA | 60 | | | V |
| $V_F$ | $I_F$=1.0A | | 0.30 | 0.35 | V |
| $V_F$ | $I_F$=1.0A, $T_A$=125°C | | 0.20 | | V |
| $V_F$ | $I_F$=8.0A | | 0.47 | 0.54 | V |
| $V_F$ | $I_F$=8.0A, $T_A$=125°C | | 0.46 | | V |

R2 (26-April 2012)

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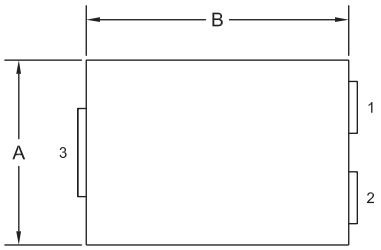
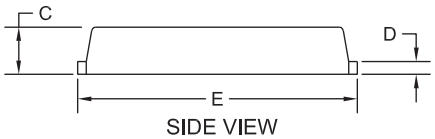
## TLM364 CASE - MECHANICAL OUTLINE



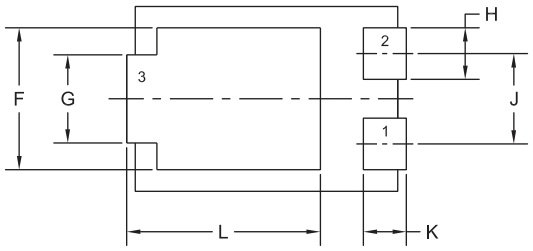

TOP VIEW

| DIMENSIONS | | | | |
|---|---|---|---|---|
| | INCHES | | MILLIMETERS | |
| SYMBOL | 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)

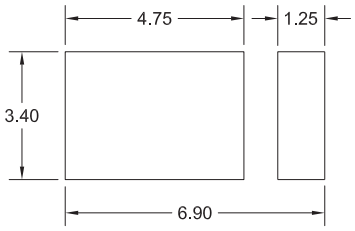



SIDE VIEW




BOTTOM VIEW R0

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




R0

**LEAD CODE:**
1) Anode
2) Anode
3) Cathode

**MARKING CODE: CTLSH86**