

# PRODUCT BRIEF

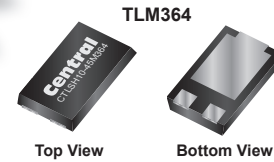
## CTLSH10-45M364

10A, 45V

Low  $V_F$  Schottky Rectifier  
in the TLM364 package

Ideal for  
solar  
applications

**Central**  
Semiconductor Corp.



Central Semiconductor's CTLSH10-45M364 is a high performance 10 amp silicon Schottky rectifier ideal for applications requiring a low profile by-pass diode such as solar panels.

### Features:

- Low forward voltage
- Low reverse leakage current
- Low profile
- High surge capability

### Applications:

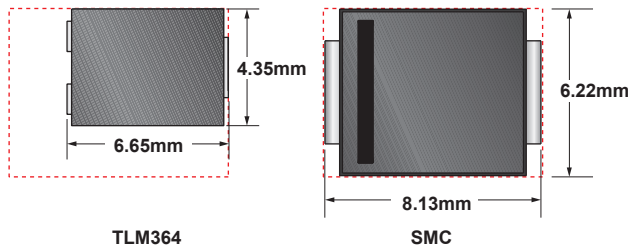
- DC-DC output rectification
- Reverse polarity protection
- By-pass diode
- OR-ing diode

### Benefits:

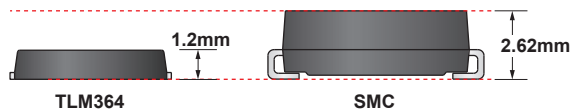
- High current density
- Low profile package
- Energy efficiency

### Package Size and Comparison:

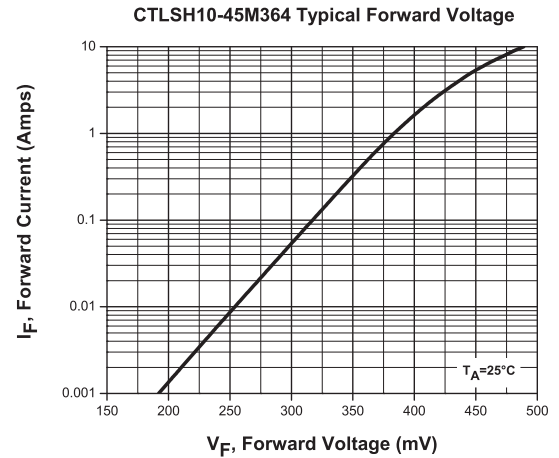
The TLM364 utilizes **42%** less board space than the SMC



The TLM364 has a **55%** lower profile than the SMC



### Typical Electrical Characteristics



### Application Resources



#### Alternative Energy

For more information on alternative energy application resources visit:

[www.centalsemi.com/product/applications/alt\\_energy](http://www.centalsemi.com/product/applications/alt_energy)

### Weblink:

Use QR reader for direct link to product web page,  
or use: [www.centalsemi.com/info/CTLSH10-45M364](http://www.centalsemi.com/info/CTLSH10-45M364)



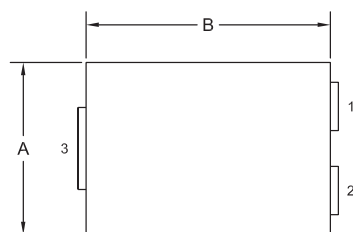
| Maximum Ratings ( $T_A = 25^\circ\text{C}$ unless otherwise noted) |                                                  |                                               |                                                       | Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted) |                     |                          |                          |                          |          |             |
|--------------------------------------------------------------------|--------------------------------------------------|-----------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------|---------------------|--------------------------|--------------------------|--------------------------|----------|-------------|
| $V_{RRM}$<br>(V)<br>MAX                                            | $I_O$<br>$T_L = 100^\circ\text{C}$<br>(A)<br>MAX | $T_J, T_{stg}$<br>( $^\circ\text{C}$ )<br>MAX | $\theta_{JA}$<br>( $^\circ\text{C}/\text{W}$ )<br>MAX | $V_F$                                                                         |                     | @ $I_F$                  | $I_R$                    |                          | @ $V_R$  | $C_J$       |
|                                                                    |                                                  |                                               |                                                       | (V)<br>TYP                                                                    | (V)<br>MAX          | (A)                      | ( $\mu\text{A}$ )<br>TYP | ( $\mu\text{A}$ )<br>MAX | (V)      | (pF)<br>TYP |
| 45                                                                 | 10                                               | -55 to +150                                   | 60                                                    | 0.44<br>0.34<br>0.49<br>0.42                                                  | —<br>—<br>0.55<br>— | 5.0<br>*5.0<br>10<br>*10 | 20<br>*9.0mA             | 50<br>—                  | 45<br>45 | 620         |

\* $T_A = 125^\circ\text{C}$

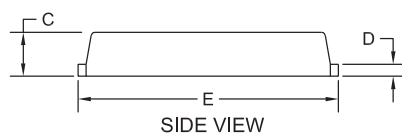
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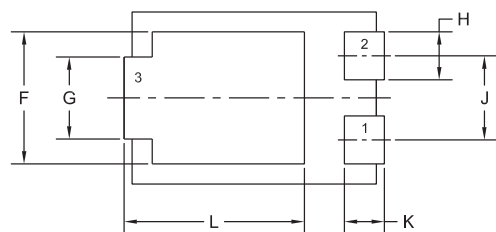
## Mechanical Drawing - TLM364



TOP VIEW



SIDE VIEW



BOTTOM VIEW R0

| SYMBOL | DIMENSIONS |       |             |      |
|--------|------------|-------|-------------|------|
|        | 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)

### Lead Code:

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

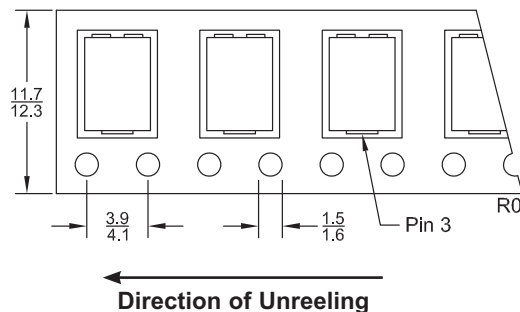
### Marking Code:

CTSH1045

## Tape Dimensions and Orientation

(Dimensions in mm)

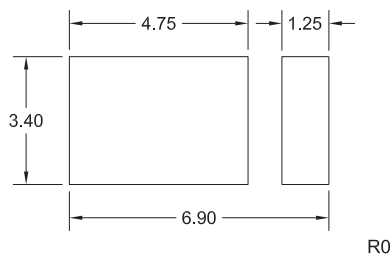
Tape Width: 12mm



\* Devices are taped in accordance with Electronic Industries Association Standard EIA-481-D

## Mounting Pad Geometry

(Dimensions in mm)



## Samples and Literature:



Stay up to date on Central's latest new products:

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[www.centrasemi.com/subscribe](http://www.centrasemi.com/subscribe)

## Packaging Base / Ordering Information

| Reel Size | Quantity | Central Item No.    |
|-----------|----------|---------------------|
| 13"       | 5,000    | CTLSH10-45M364 TR13 |

TR13 = Suffix for 13 inch reels

To request samples visit:

[www.centrasemi.com/info/CTLSH10-45M364](http://www.centrasemi.com/info/CTLSH10-45M364)

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PB CTLSH10-45M364