



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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**CTLSH10-100L****SURFACE MOUNT SILICON  
LOW  $V_F$   
SCHOTTKY RECTIFIER**
[www.centrasemi.com](http://www.centrasemi.com)
**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CTLSH10-100L is a high performance 10 Amp silicon Schottky rectifier designed for applications requiring high current, energy efficiency and a low profile package.

**MARKING CODE: CSH10100****APPLICATIONS:**

- DC-DC output rectification
- Reverse polarity protection
- Power management

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

Peak Repetitive Reverse Voltage
DC Blocking Voltage
RMS Reverse Voltage
Average Forward Current ( $T_L=90^\circ\text{C}$ )
Peak Forward Surge Current, $t_p=8.3\text{ms}$
Operating and Storage Junction Temperature
Thermal Resistance (Note 1)
Thermal Resistance (Note 1)

**FEATURES:**

- Low forward voltage,  $V_F=645\text{mV TYP @ 10A}$
- Low reverse leakage current,  $I_R=15\mu\text{A TYP @ 100V}$
- Low profile 1.2mm MAX package height

SYMBOL		UNITS
$V_{RRM}$	100	V
$V_R$	100	V
$V_{R(RMS)}$	70	V
$I_O$	10	A
$I_{FSM}$	300	A
$T_J, T_{stg}$	-55 to +150	$^\circ\text{C}$
$\theta_{JL}$	10	$^\circ\text{C/W}$
$\theta_{JA}$	23	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=100\text{V}$		15	150	$\mu\text{A}$
$I_R$	$V_R=100\text{V}, T_A=125^\circ\text{C}$		15		mA
$BV_R$	$I_R=0.5\text{mA}$	100			V
$V_F$	$I_F=5.0\text{A}$		530		mV
$V_F$	$I_F=5.0\text{A}, T_A=125^\circ\text{C}$		450		mV
$V_F$	$I_F=10\text{A}$		645	680	mV
$V_F$	$I_F=10\text{A}, T_A=125^\circ\text{C}$		540		mV
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$		610		pF

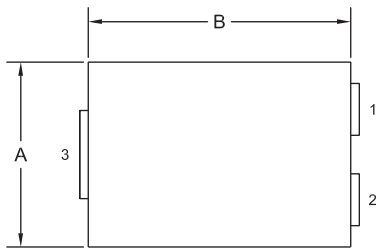
Notes: (1) FR-4 epoxy PCB with 25cm<sup>2</sup> copper pad area.

R1 (4-April 2013)

**CTLSH10-100L**  
**SURFACE MOUNT SILICON**  
**LOW  $V_F$**   
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**TLM364 CASE - MECHANICAL OUTLINE**



TOP VIEW

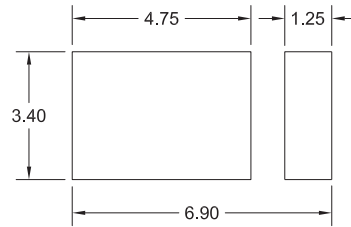
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.167	0.172	4.25	4.35
B	0.238	0.243	6.05	6.15
C	0.039	0.048	1.00	1.20
D	0.009	0.014	0.25	0.35
E	0.250	0.262	6.35	6.65
F	0.128	0.136	3.25	3.45
G	0.076	0.085	1.95	2.15
H	0.044	0.052	1.10	1.30
J	0.083		2.10	
K	0.035	0.044	0.90	1.10
L	0.171	0.183	4.35	4.65

TLM364 (REV:R0)

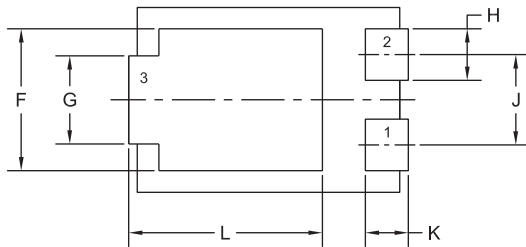


SIDE VIEW

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



R0



BOTTOM VIEW R0

**LEAD CODE:**

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

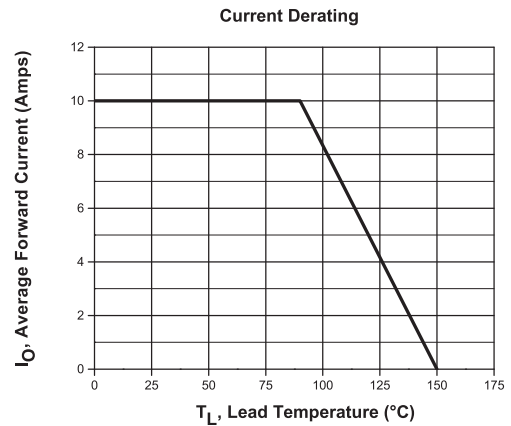
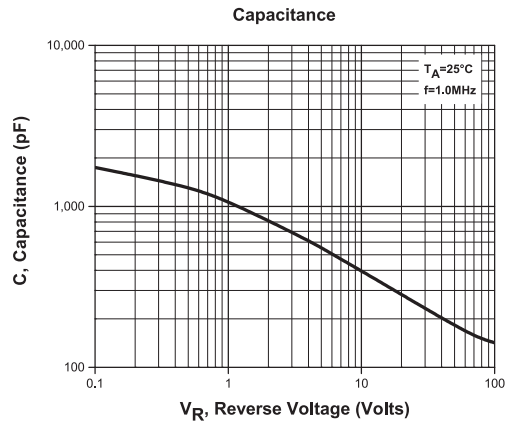
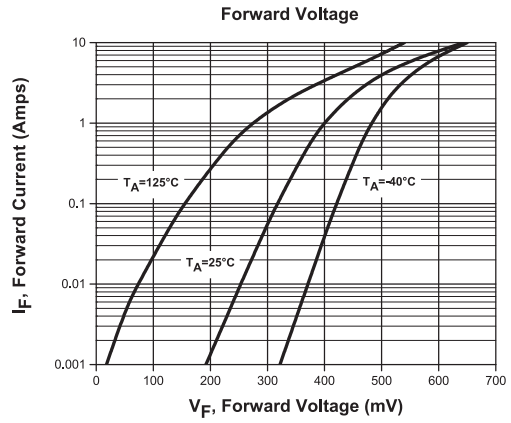
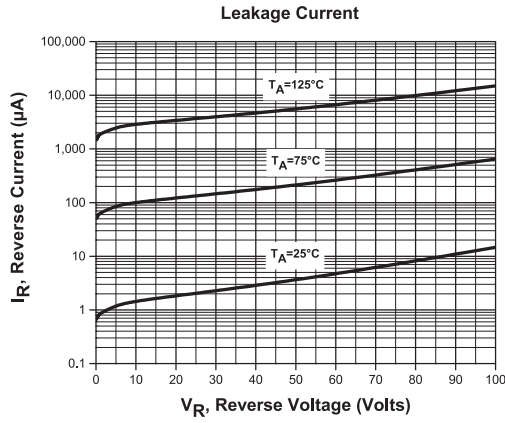
**MARKING CODE: CSH10100**

R1 (4-April 2013)

**CTL5H10-100L**  
**SURFACE MOUNT SILICON**  
**LOW  $V_F$**   
**SCHOTTKY RECTIFIER**



**TYPICAL ELECTRICAL CHARACTERISTICS**



R1 (4-April 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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