

CTLSH10-100L**SURFACE MOUNT SILICON
LOW V_F
SCHOTTKY RECTIFIER**
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	$^\circ\text{C}$
θ_{JL}	10	$^\circ\text{C/W}$
θ_{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	μA
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

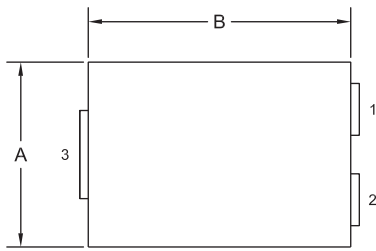
Notes: (1) FR-4 epoxy PCB with 25cm² copper pad area.

R1 (4-April 2013)

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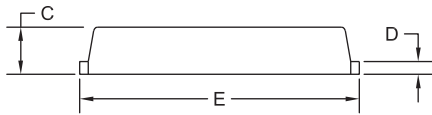
TLM364 CASE - MECHANICAL OUTLINE



TOP VIEW

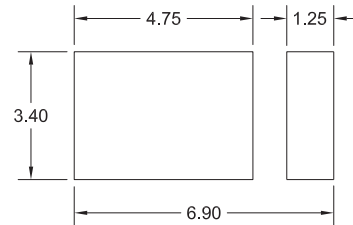
SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.167	0.172	4.25	4.35
B	0.238	0.243	6.05	6.15
C	0.039	0.048	1.00	1.20
D	0.009	0.014	0.25	0.35
E	0.250	0.262	6.35	6.65
F	0.128	0.136	3.25	3.45
G	0.076	0.085	1.95	2.15
H	0.044	0.052	1.10	1.30
J	0.083		2.10	
K	0.035	0.044	0.90	1.10
L	0.171	0.183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

TLM364 (REV:R0)

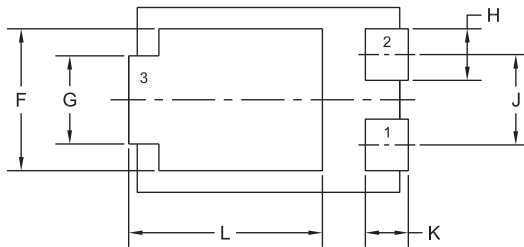


SIDE VIEW

SUGGESTED MOUNTING PADS
 (Dimensions in mm)



R0



BOTTOM VIEW R0

LEAD CODE:

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

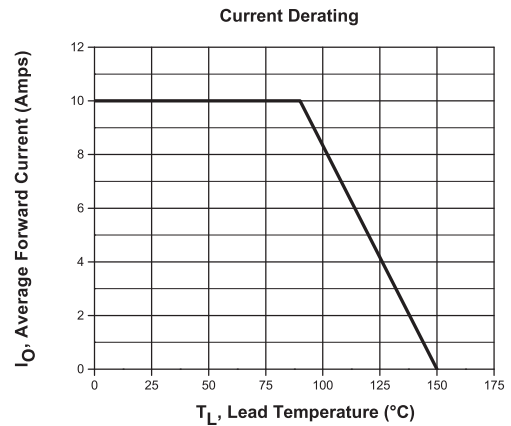
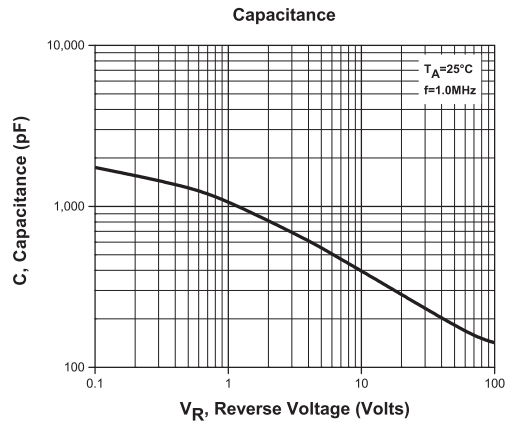
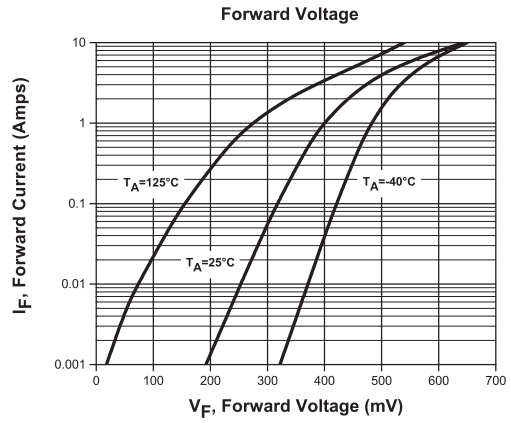
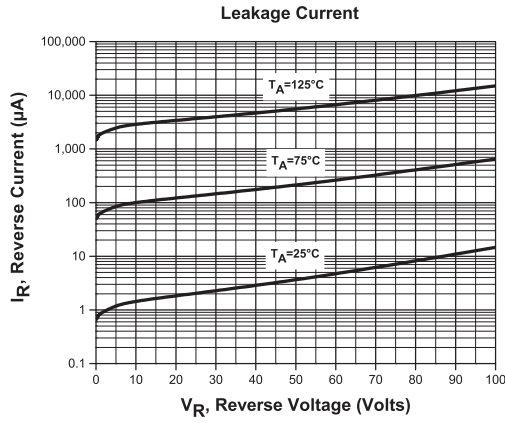
MARKING CODE: CSH10100

R1 (4-April 2013)

CTL5H10-100L
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TYPICAL ELECTRICAL CHARACTERISTICS



R1 (4-April 2013)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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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