

CTL SH10-100L

**SURFACE MOUNT SILICON
LOW V_F
SCHOTTKY RECTIFIER**


www.centralsemi.com
DESCRIPTION:

The CENTRAL SEMICONDUCTOR CTL SH10-100L 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°C)

Peak Repetitive Reverse Voltage

DC Blocking Voltage

RMS Reverse Voltage

Average Forward Current (T_L=90°C)

Peak Forward Surge Current, t_p=8.3ms

Operating and Storage Junction Temperature

Thermal Resistance (Note 1)

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FEATURES:

- Low forward voltage, V_F=645mV TYP @ 10A
- Low reverse leakage current, I_R=15µA 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	°C
Θ _{JL}	10	°C/W
Θ _{JA}	23	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _R	V _R =100V		15	150	µA
I _R	V _R =100V, T _A =125°C		15		mA
BV _R	I _R =0.5mA	100			V
V _F	I _F =5.0A		530		mV
V _F	I _F =5.0A, T _A =125°C		450		mV
V _F	I _F =10A		645	680	mV
V _F	I _F =10A, T _A =125°C		540		mV
C _J	V _R =4.0V, f=1.0MHz		610		pF

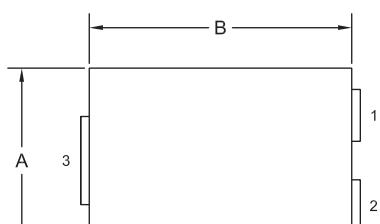
Notes: (1) FR-4 epoxy PCB with 25cm² copper pad area.

CTLSH10-100L

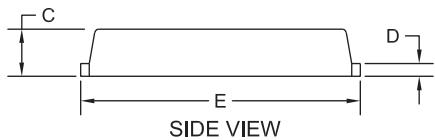
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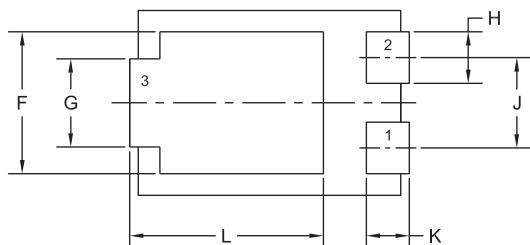
TLM364 CASE - MECHANICAL OUTLINE



TOP VIEW



SIDE VIEW

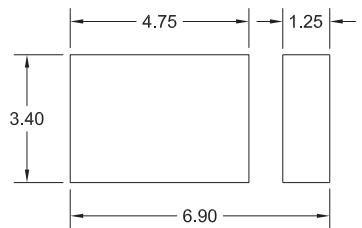


BOTTOM VIEW

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	2.15	0.085	2.21
H	0.044	1.30	0.052	1.40
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: CSH10100

R1 (4-April 2013)

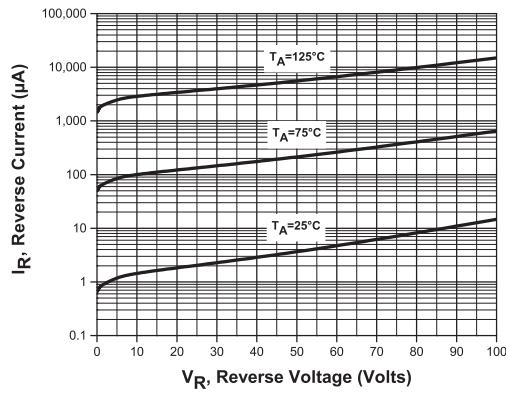
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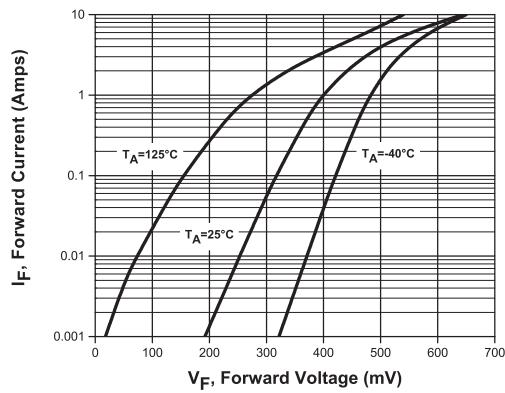


TYPICAL ELECTRICAL CHARACTERISTICS

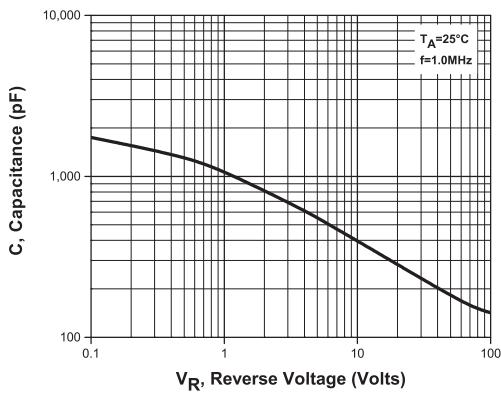
Leakage Current



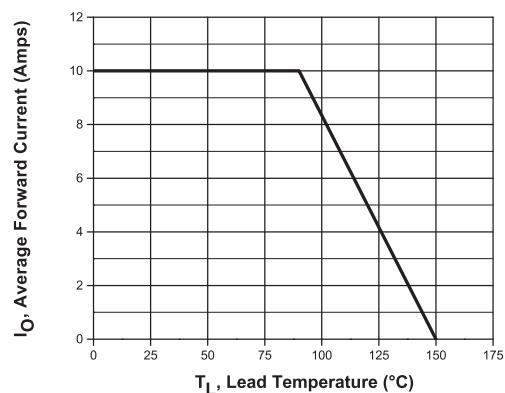
Forward Voltage



Capacitance



Current Derating



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

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).

CONTACT US

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