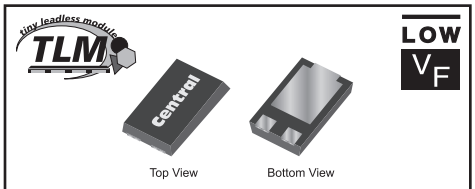
CTLSH10-100L

SURFACE MOUNT SILICON
LOW V_F
SCHOTTKY RECTIFIER



TLM364 CASE

www.centralsemi.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

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

MAXIMUM RATINGS: (T_A=25°C)	**SYMBOL**		**UNITS**
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
DC Blocking Voltage	V_R	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	V
Average Forward Current (T_L=90°C)	I_O	10	A
Peak Forward Surge Current, tp=8.3ms	I_{FSM}	300	A
Operating and Storage Junction Temperature	T_J, T_{stg}	-55 to +150	°C
Thermal Resistance (Note 1)	Θ_{JL}	10	°C/W
Thermal Resistance (Note 1)	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 25cm^2 copper pad area.

R1 (4-April 2013)

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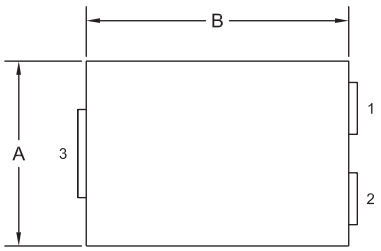
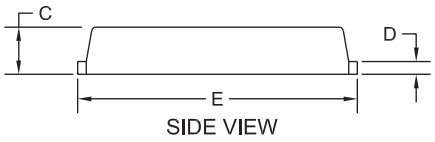
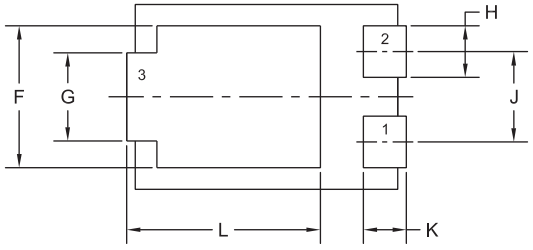
TLM364 CASE - MECHANICAL OUTLINE



TOP VIEW



SIDE VIEW

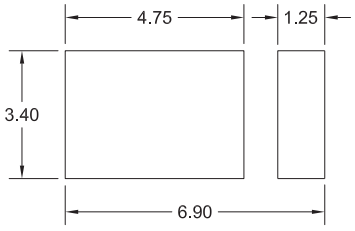


BOTTOM VIEW R0

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)

SUGGESTED MOUNTING PADS
(Dimensions in mm)



R0

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

MARKING CODE: CSH10100

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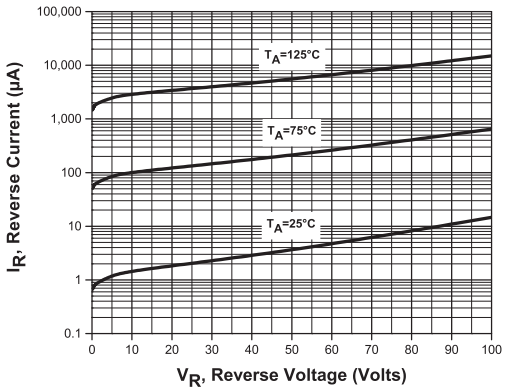
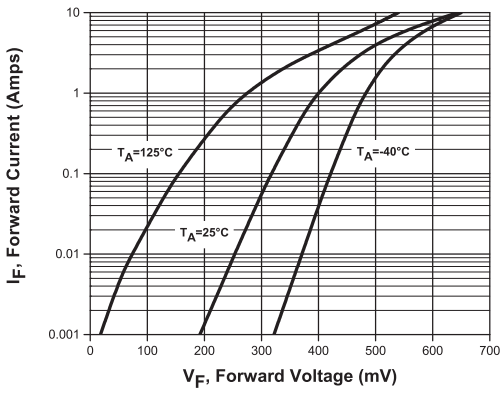
TYPICAL ELECTRICAL CHARACTERISTICS

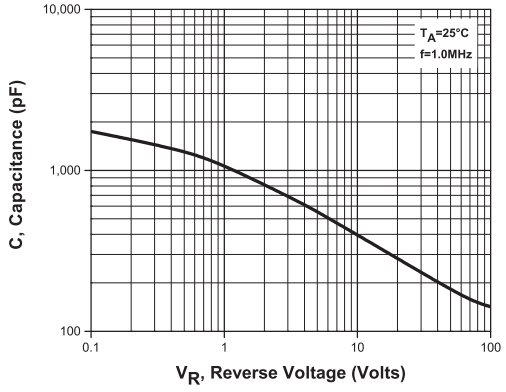
Leakage Current



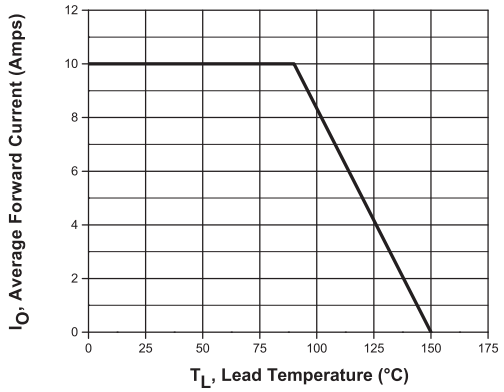
Forward Voltage



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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