

CTLR5-06

**SURFACE MOUNT SILICON
RECTIFIER
5.0 AMP, 600 VOLT**



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CTLR5-06 is a high voltage rectifier packaged in the low profile TLM364 case. The CTLR5-06 offers high current density in a package that is ideal for space constrained industrial, consumer, medical and power supply applications.

MARKING: FULL PART NUMBER



APPLICATIONS:

- Input rectification
- Reverse polarity protection
- Voltage clamping
- Voltage multipliers

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

Peak Repetitive Reverse Voltage
DC Blocking Voltage
RMS Reverse Voltage
Average Forward Current
Peak Forward Surge Current, $t_p=8.3\text{ms}$
Operating and Storage Junction Temperature

FEATURES:

- Low profile package
- Glass passivated die for high reliability
- High peak forward surge current (I_{FSM})
- Low forward voltage drop (V_F)

SYMBOL		UNITS
V_{RRM}	600	V
V_R	600	V
$V_{R(RMS)}$	420	V
I_O	5.0	A
I_{FSM}	150	A
T_J, T_{stg}	-55 to +150	$^{\circ}\text{C}$

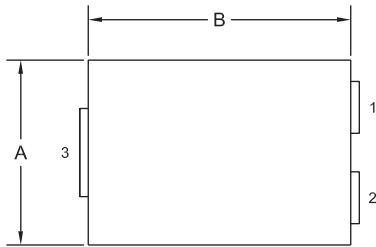
ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=600\text{V}$		0.03	5.0	μA
I_R	$V_R=600\text{V}, T_A=125^{\circ}\text{C}$		9.0	50	μA
BV_R	$I_R=100\mu\text{A}$	600			V
V_F	$I_F=5.0\text{A}$		0.94	1.0	V
C_J	$V_R=0, f=1.0\text{MHz}$		104	125	pF

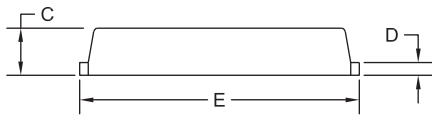
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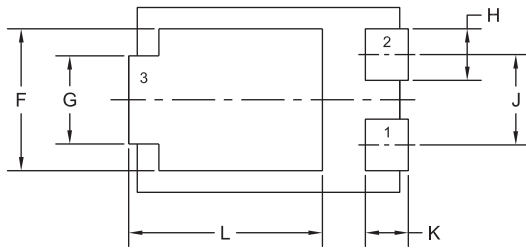
TLM364 CASE - MECHANICAL OUTLINE



TOP VIEW



SIDE VIEW

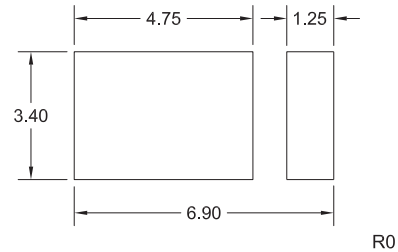


BOTTOM VIEW R0

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)

SUGGESTED MOUNTING PADS
(Dimensions in mm)



R0

LEAD CODE:

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

MARKING: FULL PART NUMBER

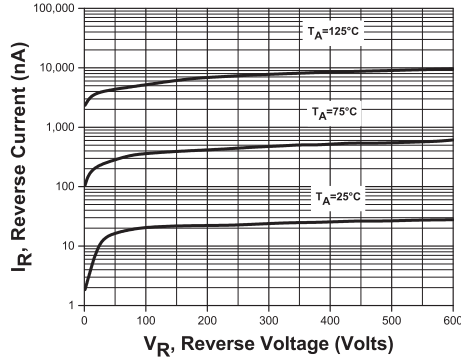
R2 (8-September 2014)

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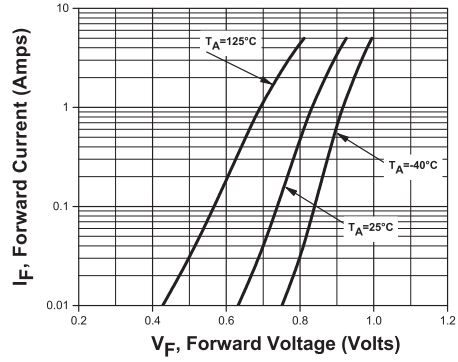


TYPICAL ELECTRICAL CHARACTERISTICS

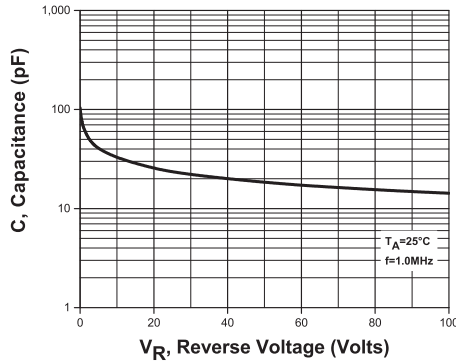
Leakage Current



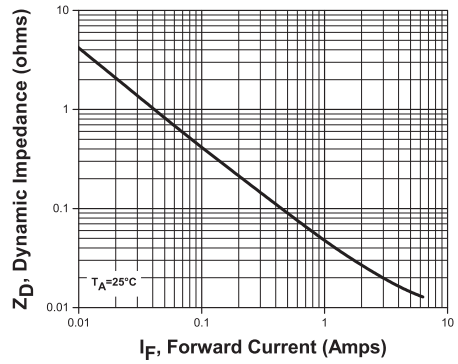
Forward Voltage



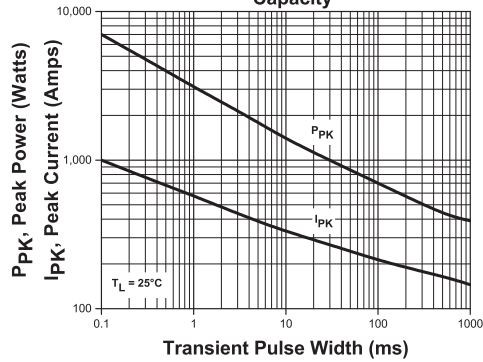
Capacitance



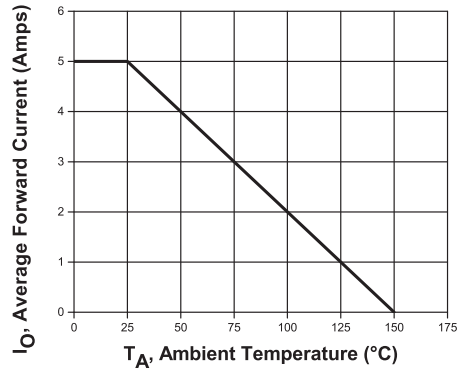
Forward Dynamic Impedance



Transient Peak Power and Peak Current Capacity



Current Derating



R2 (8-September 2014)

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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