

CTLR5-06

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



[www.centrasemi.com](http://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

**FEATURES:**

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

**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

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	$^\circ\text{C}$

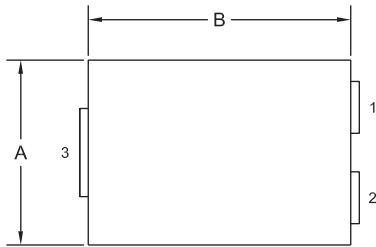
**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=600\text{V}$		0.03	5.0	$\mu\text{A}$
$I_R$	$V_R=600\text{V}, T_A=125^\circ\text{C}$		9.0	50	$\mu\text{A}$
$BV_R$	$I_R=100\mu\text{A}$	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

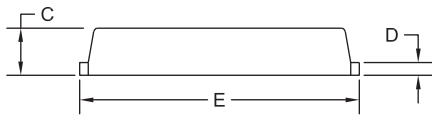
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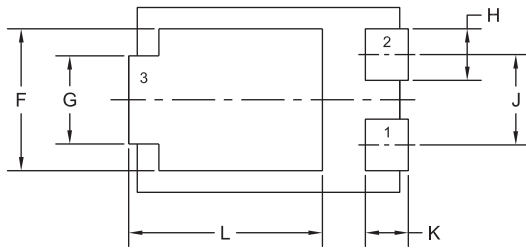
**TLM364 CASE - MECHANICAL OUTLINE**



TOP VIEW



SIDE VIEW

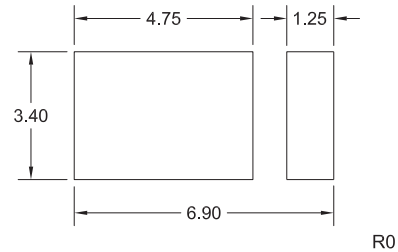


BOTTOM VIEW R0

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)



**LEAD CODE:**

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

**MARKING: FULL PART NUMBER**

R2 (8-September 2014)

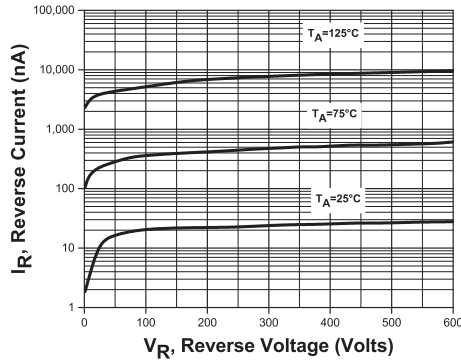
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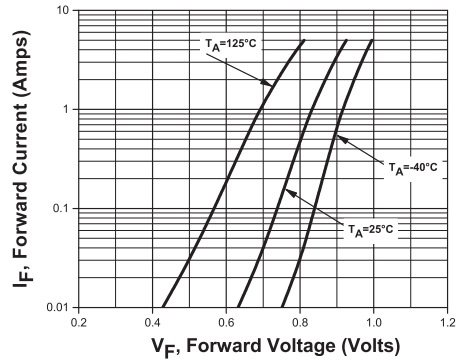


TYPICAL ELECTRICAL CHARACTERISTICS

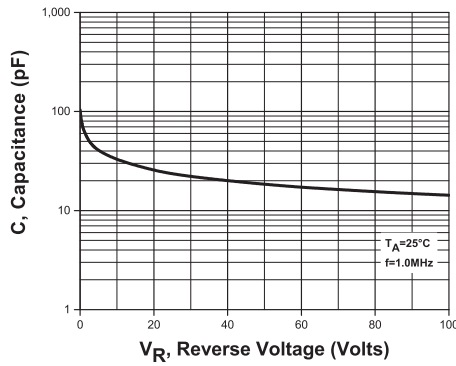
Leakage Current



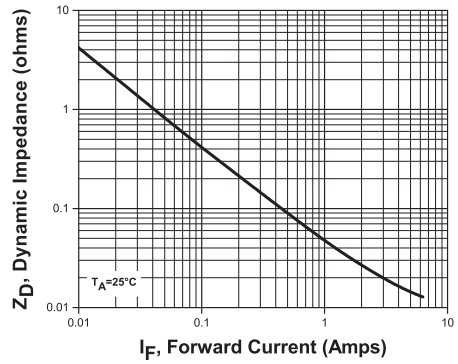
Forward Voltage



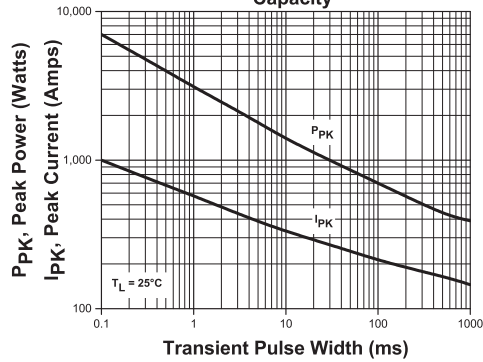
Capacitance



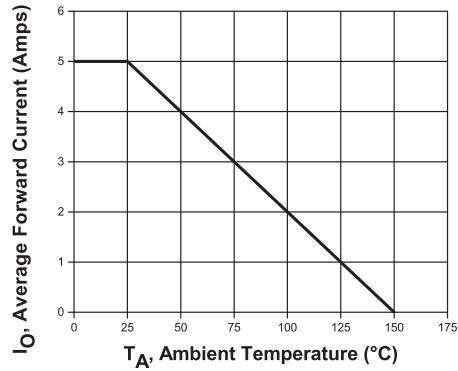
Forward Dynamic Impedance



Transient Peak Power and Peak Current Capacity



Current Derating



R2 (8-September 2014)