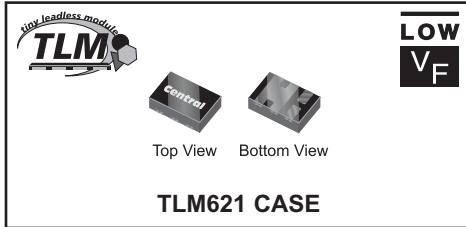


CTLSH05-40M621
SURFACE MOUNT
LOW V_F
SILICON SCHOTTKY DIODE



www.centrasemi.com



DESCRIPTION:

The CENTRAL SEMICONDUCTOR CTLSH05-40M621 Low V_F Schottky Diode packaged in a TLM™ (Tiny Leadless Module™), is a high quality Schottky Diode designed for applications where small size and operational efficiency are the prime requirements. With a maximum power dissipation of 0.9W, and a very small package footprint (comparable to the SOT-563), this leadless package design is capable of dissipating over 3 times the power of similar devices in comparable sized surface mount packages.

MARKING CODE: CH

APPLICATIONS:

- DC/DC Converters
- Voltage Clamping
- Protection Circuits
- Battery Powered Portable Equipment

FEATURES:

- Very Small Package Size
- Current (I_F=0.5A)
- Low Forward Voltage Drop (V_F=0.47V MAX @ 0.5A)
- High Thermal Efficiency
- Small TLM 2x1mm case

MAXIMUM RATINGS: (T_A=25°C)

Peak Repetitive Reverse Voltage	V _{RRM}	40	V
Continuous Forward Current	I _F	500	mA
Peak Repetitive Forward Current, tp≤1.0ms	I _{FRM}	3.5	A
Peak Forward Surge Current, tp=8.0ms	I _{FSM}	10	A
Power Dissipation (See Note 1)	P _D	0.9	W
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance (See Note 1)	θ _{JA}	139	°C/W

SYMBOL

UNITS

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _R	V _R =10V		20	μA
I _R	V _R =30V		100	μA
BV _R	I _R =500μA	40		V
V _F	I _F =100μA		0.13	V
V _F	I _F =1.0mA		0.21	V
V _F	I _F =10mA		0.27	V
V _F	I _F =100mA		0.35	V
V _F	I _F =500mA		0.47	V
C _T	V _R =1.0V, f=1.0MHz		50	pF

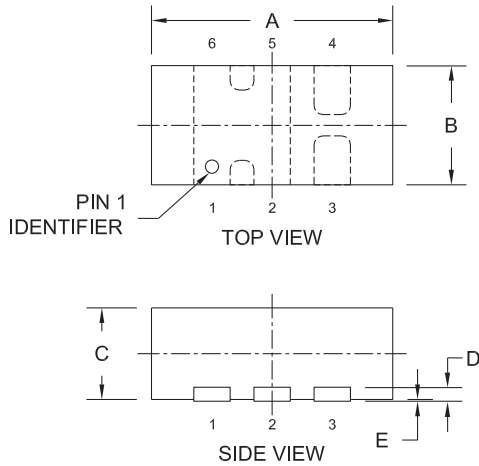
Note 1: FR-4 Epoxy PCB with copper mounting pad area of 33mm²

CTLSH05-40M621

**SURFACE MOUNT
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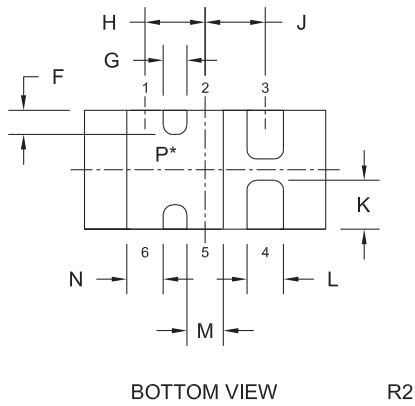


TLM621 CASE - MECHANICAL OUTLINE



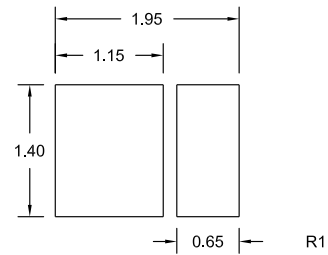
SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.073	0.085	1.850	2.150
B	0.033	0.045	0.850	1.150
C	0.028	0.031	0.700	0.800
D	0.006		0.150	
E	0.000	0.002	0.000	0.050
F	0.008		0.200	
G	0.010		0.250	
H	0.020		0.500	
J	0.020		0.500	
K	0.012	0.020	0.300	0.500
L	0.007	0.012	0.180	0.300
M	0.007	0.012	0.180	0.300
N	0.007	0.012	0.180	0.300

TLM621 (REV: R2)

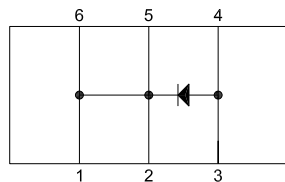


* Exposed pad P connects pins 1, 2, 5, and 6.

**SUGGESTED MOUNTING PADS
For Maximum Power Dissipation
(Dimensions in mm)**



For standard mounting refer to TLM621 Package Details



LEAD CODE:

- 1) Cathode 4) Anode
- 2) Cathode 5) Cathode
- 3) Anode 6) Cathode

MARKING CODE: CH

R3 (19-February 2010)