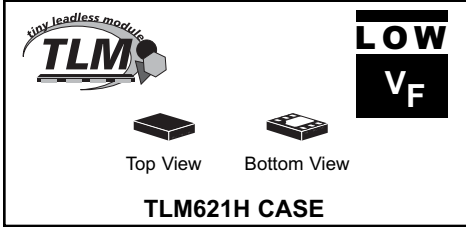




CTLSH1-40M621H

**SURFACE MOUNT
HIGH CURRENT, LOW V_F
SILICON SCHOTTKY RECTIFIER
TINY LEADLESS MODULE™**



**Central™
Semiconductor Corp.**

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CTLSH1-40M621H is a very low profile (0.4mm), low V_F Schottky rectifier in a small, thermally efficient, 1.5mm x 2mm Tiny Leadless Module (TLM) package.

MARKING CODE: CNE

FEATURES:

- Device is **Halogen Free** by design
- High Current ($I_F=1.0A$)
- Low Forward Voltage Drop ($V_F=0.55V$ Max @ 1.0A)
- High Thermal Efficiency

APPLICATIONS:

- DC/DC Converters
- Reverse Battery Protection
- Battery powered devices including Cell Phones, PDAs, Digital Cameras, MP3 Players, etc.

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

Peak Repetitive Reverse Voltage
 Continuous Forward Current
 Peak Repetitive Forward Current, $t_p \leq 1ms$
 Forward Surge Current, $t_p = 8ms$
 Power Dissipation (Note 1)
 Operating and Storage Junction Temperature
 Thermal Resistance (Note 1)

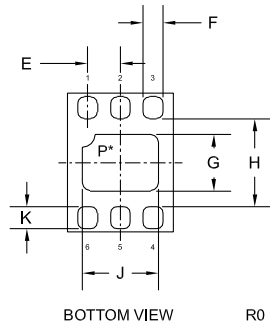
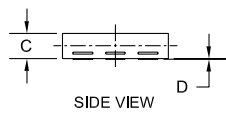
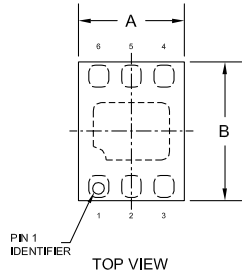
SYMBOL		UNITS
V_{RRM}	40	V
I_F	1.0	A
I_{FRM}	3.5	A
I_{FSM}	6.0	A
P_D	1.6	W
T_J, T_{stg}	-65 to +150	$^\circ C$
θ_{JA}	75	$^\circ C/W$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=5.0V$			10	μA
I_R	$V_R=8.0V$			20	μA
I_R	$V_R=15V$			50	μA
I_R	$V_R=40V$			0.2	mA
I_R	$V_R=40V, T_A=100^\circ C$			20	mA
BV_R	$I_R=100\mu A$	40			V
V_F	$I_F=10mA$			0.30	V
V_F	$I_F=100mA$			0.40	V
V_F	$I_F=500mA$			0.50	V
V_F	$I_F=1.0A$			0.60	V
C_J	$V_R=4.0V, f=1.0MHz$		50		pF
t_{rr}	$I_F=I_R=500mA, I_{rr}=50mA, R_L=50\Omega$		15		ns

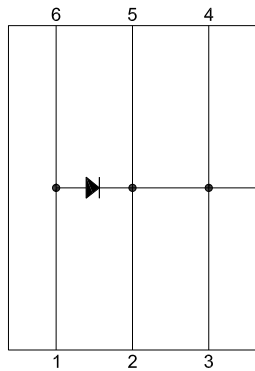
Notes: (1) Mounted on a 4-layer JEDEC test board with one thermal via connecting the exposed thermal pad to the first buried plane. PCB was constructed as per JEDEC standards JESD51-5 and JESD51-7.

TLM621H CASE - MECHANICAL OUTLINE



* Exposed pad P internally connected to pins 3 and 4

PIN CONFIGURATION

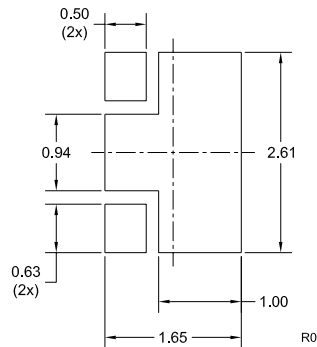


DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.053	0.065	1.35	1.65
B	0.073	0.085	1.85	2.15
C	0.012	0.016	0.30	0.40
D	0.000	0.002	0.00	0.05
E	0.020		0.50	
F	0.008	0.012	0.20	0.30
G	0.027	0.035	0.69	0.89
H	0.053	0.057	1.35	1.45
J	0.039	0.047	0.99	1.19
K	0.011	0.015	0.28	0.38

TLM621H (REV:R0)

OPTIONAL MOUNTING PADS

(Dimensions in mm)



For standard mounting refer to TLM621H Package Details

LEAD CODE:

- 1) ANODE
- 2) CATHODE
- 3) CATHODE
- 4) CATHODE
- 5) CATHODE
- 6) ANODE

MARKING CODE: CNE

R3 (13-November 2008)