

CTLSH1-40M621H

**SURFACE MOUNT SILICON
HIGH CURRENT, LOW V_F
SCHOTTKY RECTIFIER**

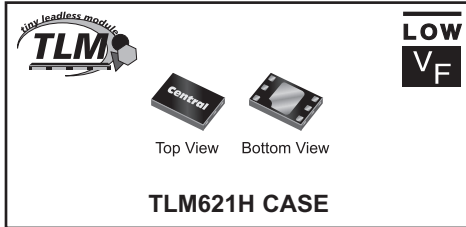


www.centrasemi.com

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



• Device is **Halogen Free** by design

APPLICATIONS:

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

FEATURES:

- High Current (I_F=1.0A)
- Low Forward Voltage Drop (V_F=0.55V MAX @ 1.0A)
- High Thermal Efficiency

MAXIMUM RATINGS: (T_A=25°C)

Peak Repetitive Reverse Voltage
 Continuous Forward Current
 Peak Repetitive Forward Current, tp≤1.0ms
 Peak Forward Surge Current, tp=8.0ms
 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	°C
θ _{JA}	75	°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°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°C			20	mA
BV _R	I _R =100μA	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 =50Ω		15		ns

Note 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.

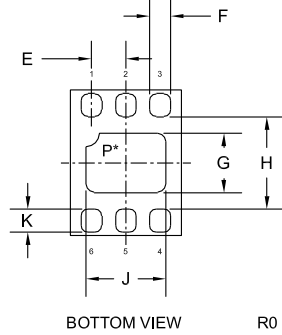
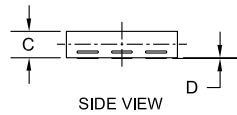
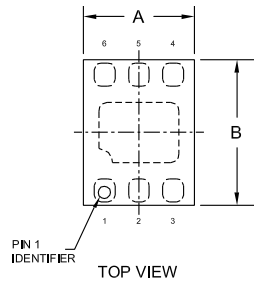
R5 (22-December 2015)

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TLM621H CASE - MECHANICAL OUTLINE



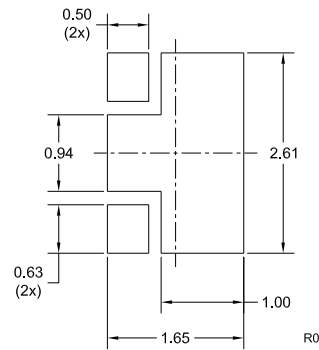
*Exposed pad P internally connected to pins 2, 3, 4, and 5.

SYMBOL	DIMENSIONS			
	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)

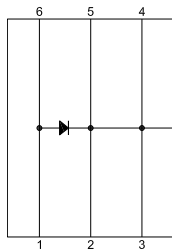
OPTIONAL MOUNTING PADS

(Dimensions in mm)



For standard mounting refer to TLM621H Package Details

PIN CONFIGURATION



LEAD CODE:

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

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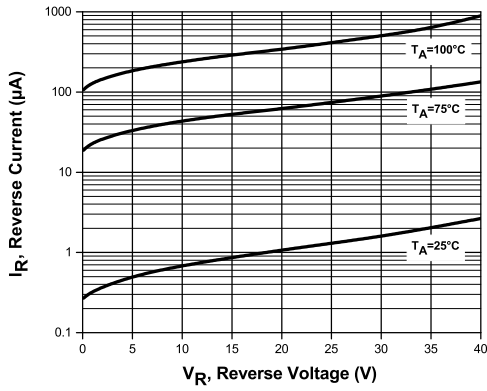
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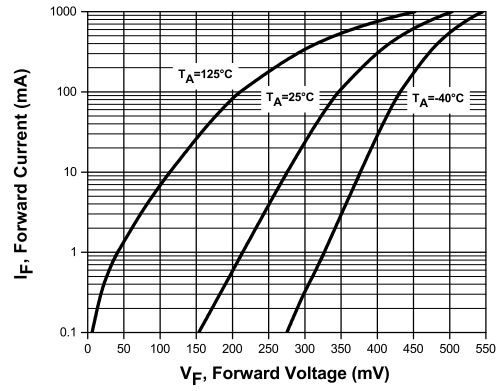


TYPICAL ELECTRICAL CHARACTERISTICS

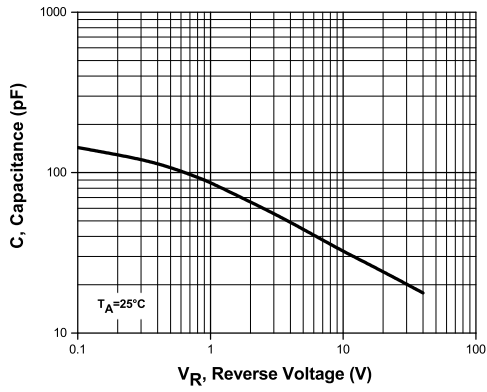
Leakage Current



Forward Voltage



Capacitance



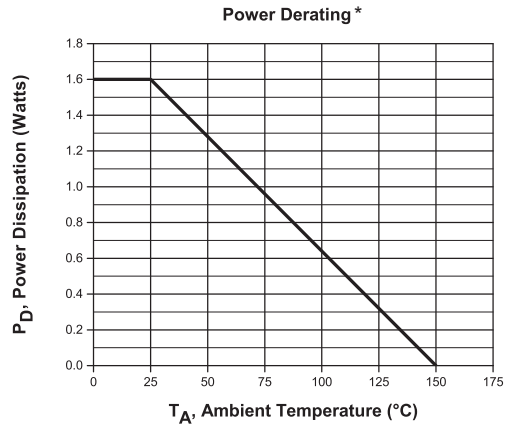
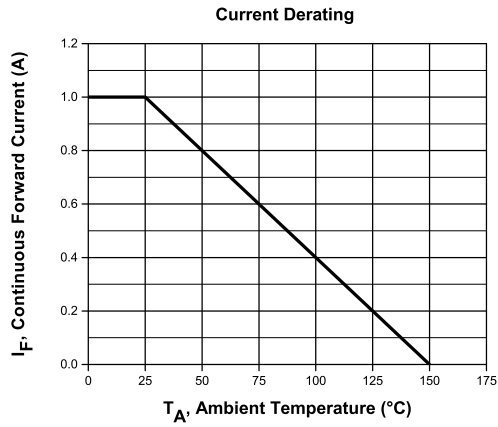
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