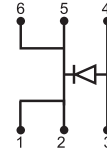


PRODUCT BRIEF

CTLSH1-40M563

**40V, 1.0A space saving,
low V_F Schottky rectifier
with improved power dissipation**

TLM563

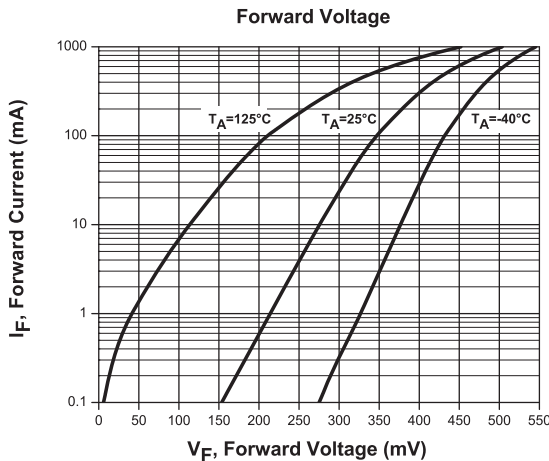


Marking Code: CJB

The Central Semiconductor **CTLSH1-40M563** is a high quality, low V_F Schottky rectifier packaged in a space saving 1.6 x 1.6mm TLM™ surface mount package. This device is a TLM™ equivalent of the popular CMLSH1-40, SOT-563 device, featuring enhanced thermal characteristics, a package footprint compatible with standard SOT-563 mounting pad geometries, and a height profile of only 0.43mm.

Features

- Low profile package (0.43mm)
- Low V_F (0.36V @ 100mA)
- High Thermal Efficiency (500mW)
- RoHS compliant/ Pb Free/
Halogen Free by design



Package Comparison TLM563 vs. SOT-563

Drop-in replacement

The TLM563 can use the same mounting pad as the SOT-563.

Improved Power Dissipation*

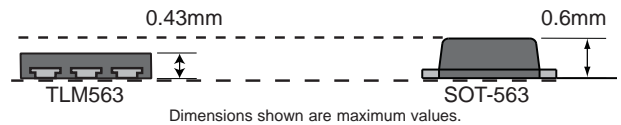
The 500mW power dissipation rating of the TLM563 is a **43%** improvement over the 350mW for the SOT-563.

* The TLM563 can dissipate 20% more heat than the SOT-563 when identical mounting conditions are used.



Lower profile

The TLM563 has a **28%** lower profile than the SOT-563.



Applications

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

Samples and Literature

Samples

To order samples of this device visit:
www.centalsemi.com/info/CTLSH1-40M563

Literature



Order your selection guides
today Visit: web.centalsemi.com/search/sample.php

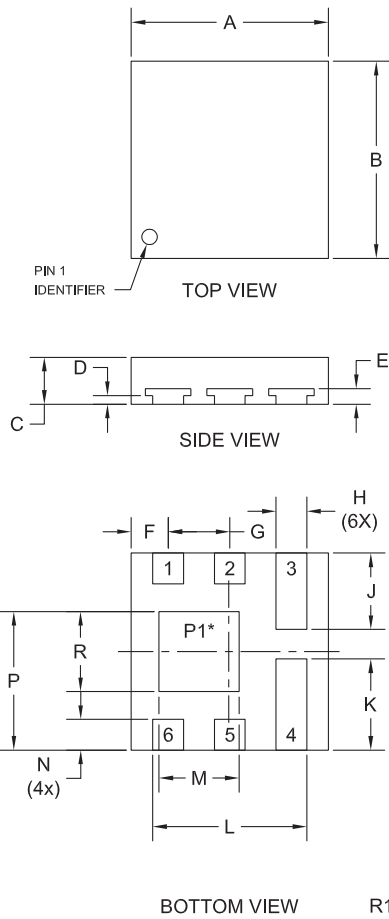
Selection Guide

Part No.	Electrical Characteristics								Thermal Characteristics		
	V_{RRM} (V) MAX	I_F (A) MAX	V_F (V) MAX	@ I_F	I_R (μ A) MAX	@ V_R (V)	t_{rr} (ns) TYP	C_J (pF) MAX	P_D (mW)	T_J, T_{stg} ($^\circ$ C) MAX	θ_{JA} ($^\circ$ C/W) MAX
CTLSH1-40M563	40	1.0	0.29 0.36 0.45 0.55	10mA 100mA 500mA 1.0A	10 20 50 200	5.0 8.0 15 40	15	50	500	-65 to +150	250

CTLSH1-40M563

**40V, 1.0A space saving,
low V_F Schottky rectifier
with improved power dissipation**

Mechanical Drawing



* Exposed pad P1 common to pins 1, 2, 5, and 6.

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.062	0.064	1.57	1.63
B	0.062	0.064	1.57	1.63
C	0.014	0.017	0.36	0.43
D	0.002	0.004	0.04	0.10
E	0.004	0.006	0.10	0.16
F	0.011	0.013	0.27	0.33
G	0.019	0.021	0.47	0.53
H	0.009	0.011	0.22	0.28
J	0.023	0.026	0.59	0.65
K	0.028	0.030	0.71	0.77
L	0.048	0.050	1.22	1.28
M	0.024	0.027	0.62	0.68
N	0.009	0.011	0.22	0.28
P	0.043	0.045	1.09	1.16
R	0.024	0.027	0.62	0.68

TLM563 (REV:R1)

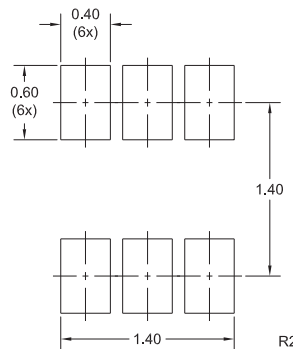
LEAD CODE:

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

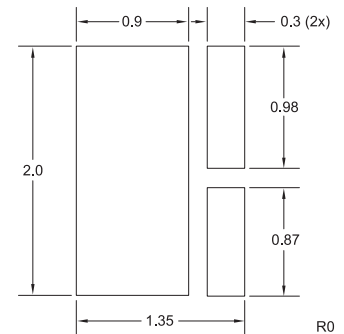
MARKING CODE: CJB

Mounting Pad Geometry (Dimensions in mm)

Standard Mounting Pad



Suggested Mounting Pad



Packaging Base

7" Reel = 3,000 pcs. (add TR suffix to part number)

Reel Packing Information

Reel Size	Reels per Box (Maximum)	Parts per Box (Maximum)	Box Dimensions		Shipping Weight (Max.)	
			INCH	CM	LB	KG
7"	3	9,000	8x7x2	20x18x5	1	1
	9	27,000	9x9x5	23x23x13	3	2
	18	54,000	9x9x9	23x23x23	6	3
	40	120,000	21x9x9	53x23x23	13	6
	108	324,000	27x9x17	69x23x43	34	16

Sample devices available upon request. To order samples of this device visit: www.centrasemi.com/info/CTLSH1-40M563



**Innovative Discrete
Semiconductors**

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(631) 435-1110 or visit our website at:
www.centrasemi.com