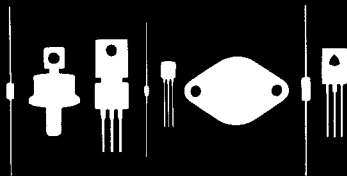


Central
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145 Adams Avenue
Hauppauge, New York 11788



1N4863
1N4864

SILICON SWITCHING DIODE

JEDEC DO-35 CASE

DESCRIPTION

The Central Semiconductor 1N4863, 1N4864 Silicon Planar Epitaxial Diodes are characterized by their miniature size, ultra fast switching speed, low capacitance, low leakage and high conductance. These highly reliable devices are ideally suited for low and high current high speed switching applications such as computer and general purpose applications.

MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)

	<u>SYMBOL</u>	<u>1N4863</u>	<u>1N4864</u>	<u>UNIT</u>
Peak Inverse Voltage	PIV	70	125	V
Peak Working Reverse Voltage	V_{RWM}	50	80	V
Average Forward Rectified Current	I_O	200	200	mA
Forward Steady-State Current	I_F	250	250	mA
Recurrent Peak Forward Current	I_{FM}	600	600	mA
Peak Forward Surge Current (1.0 μs)	I_{FSM}	4000	4000	mA
Power Dissipation	P_D	500	500	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 TO +200		$^\circ\text{C}$

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

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>1N4863</u>		<u>1N4864</u>		<u>UNIT</u>
		<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MAX</u>	
B_{VR}	$I_R=5.0\mu\text{A}$	70		-		V
B_{VR}	$I_R=100\mu\text{A}$	-		125		V
I_R	$V_R=50\text{V}$		50		-	nA
I_R	$V_R=50\text{V}, T_A=150^\circ\text{C}$		50		-	μA
I_R	$V_R=80\text{V}$		-		100	nA
I_R	$V_R=80\text{V}, T_A=150^\circ\text{C}$		-		100	μA
V_F	$I_F=0.1\text{mA}$	440	550	440	550	mV
V_F	$I_F=1.0\text{mA}$	560	680	560	680	mV
V_F	$I_F=10\text{mA}$	690	820	690	820	mV
V_F	$I_F=100\text{mA}$	830	1200	830	1100	mV
C_T	$V_R=0\text{V}$		2.0		1.3	pF
t_{rr}	$I_F=I_R=10\text{mA}, \text{Recov. to } 1.0\text{mA}$		7.0		-	ns
t_{rr}	$I_F=10\text{mA}, V_R=6.0\text{V}, R_L=100\Omega \text{ Recov. to } 1.0\text{mA}$		-		4.0	ns
t_{rr}	$I_F=I_R=100\text{mA}, \text{Recov. to } 10\text{mA}$		-		9.0	ns

Central™
Semiconductor Corp.

145 Adams Avenue
Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824
www.centralsemi.com

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

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