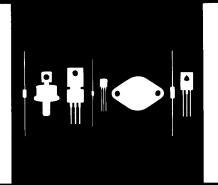
Central Semiconductor Corp. Central Semiconductor Corp. Central ™ Semiconductor Corp. 145 Adams Avenue

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

	SYMBOL	<u>1N4863</u>	<u>1N4864</u>	UNIT	
Peak Inverse Voltage Peak Working Reverse Voltage Average Forward Rectified Current Forward Steady-State Current Recurrent Peak Forward Current Peak Forward Surge Current (1.0µs) Power Dissipation Operating and Storage	PIV VRWM IO IF IFM IFSM PD	70 50 200 250 600 4000 500	125 80 200 250 600 4000 500	V V mA mA mA mW	
Junction Temperature	$T_{\sf J}, T_{\sf stg}$	-65 T	-65 TO +200		

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

		1N4863		1N4864		
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	UNIT
B _{VR}	I _R =5.0μA	70		- ,		٧
B _{VR}	I <mark>R</mark> =100μA	-		125		٧
	V _R =50V		50		-	nΑ
I _R	$V_{\rm p}^{\rm N} = 50 \text{V}, T_{\rm A} = 150 ^{\circ} \text{C}$		50			μА
ł	V _R =50V, T _A =150°C V _R =80V		-		100	n A
i R	$V_R^{\Lambda} = 80V$, $T_A = 150$ °C		-		100	μΑ
v _F v _F	I _F =0.1mA	440	550	440	550	mV
٧̈́F	I _E =1.0mA	560	680	560	680	mV
٧ <mark></mark>	I _F =10mA	690	820	690	820	mV
٧_	F=100mA	830	1200	830	1100	mV
C+	V _R =0V		2.0		1.3	рF
trr	I _F =I _R =10mA, Recov. to 1.0mA		7.0		-	ns
trr	$I_F=10\text{mA}$, $V_R=6.0\text{V}$, $R_L=100\Omega$ Recov. to 1.0mA		-		4.0	ns
trr	I _F =I _R =100mÅ, Recov. to 10mA		-		9.0	ns



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OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

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

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