

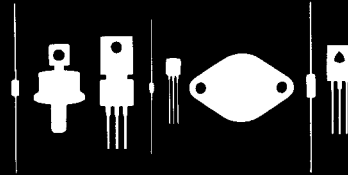
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145 Adams Avenue  
Hauppauge, New York 11788



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<sub>A</sub>=25°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 <sub>RWM</sub>	50	80	V
Average Forward Rectified Current	I <sub>O</sub>	200	200	mA
Forward Steady-State Current	I <sub>F</sub>	250	250	mA
Recurrent Peak Forward Current	I <sub>FM</sub>	600	600	mA
Peak Forward Surge Current (1.0μs)	I <sub>FSM</sub>	4000	4000	mA
Power Dissipation	P <sub>D</sub>	500	500	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 TO +200		°C

ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°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 <sub>VR</sub>	I <sub>R</sub> =5.0μA	70		-		V
B <sub>VR</sub>	I <sub>R</sub> =100μA	-		125		V
I <sub>R</sub>	V <sub>R</sub> =50V		50		-	nA
I <sub>R</sub>	V <sub>R</sub> =50V, T <sub>A</sub> =150°C		50		-	μA
I <sub>R</sub>	V <sub>R</sub> =80V		-		100	nA
I <sub>R</sub>	V <sub>R</sub> =80V, T <sub>A</sub> =150°C		-		100	μA
V <sub>F</sub>	I <sub>F</sub> =0.1mA	440	550	440	550	mV
V <sub>F</sub>	I <sub>F</sub> =1.0mA	560	680	560	680	mV
V <sub>F</sub>	I <sub>F</sub> =10mA	690	820	690	820	mV
V <sub>F</sub>	I <sub>F</sub> =100mA	830	1200	830	1100	mV
C <sub>T</sub>	V <sub>R</sub> =0V		2.0		1.3	pF
t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, Recov. to 1.0mA		7.0		-	ns
t <sub>rr</sub>	I <sub>F</sub> =10mA, V <sub>R</sub> =6.0V, R <sub>L</sub> =100Ω Recov. to 1.0mA		-		4.0	ns
t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =100mA, Recov. to 10mA		-		9.0	ns

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