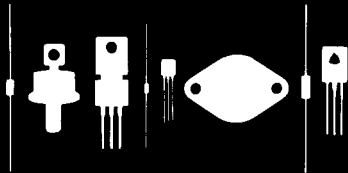


Central  
Semiconductor Corp.

**Central  
Semiconductor Corp.**  
**Central™  
Semiconductor Corp.**

145 Adams Avenue  
Hauppauge, New York 11788



2N4863

NPN SILICON TRANSISTOR

JEDEC TO-39 CASE

#### DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N4863 type is an epitaxial planar silicon NPN transistor designed for high voltage, inductive load switching applications.

MAXIMUM RATINGS ( $T_C=25^\circ\text{C}$  unless otherwise noted)

	SYMBOL		UNIT
Collector-Base Voltage	$V_{CB0}$	140	V
Collector-Emitter Voltage	$V_{CE0}$	120	V
Collector Current	$I_C$	2.0	A
Power Dissipation ( $T_C=100^\circ\text{C}$ )	$P_D$	4.0	W
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 to +200	$^\circ\text{C}$
Thermal Resistance	$\theta_{JC}$	25	$^\circ\text{C}/\text{W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
$I_{CB0}$	$V_{CB}=60\text{V}$		100	nA
$I_{CEV}$	$V_{CE}=140\text{V}, V_{EB}=0.5\text{V}$		10	$\mu\text{A}$
$I_{CE0}$	$V_{CE}=60\text{V}$		10	$\mu\text{A}$
$I_{EBO}$	$V_{EB}=8.0\text{V}$		10	$\mu\text{A}$
$BV_{CB0}$	$I_C=1.0\text{mA}$	140		V
$BV_{CE0}$	$I_C=10\text{mA}$	120		V
$BV_{EBO}$	$I_E=10\mu\text{A}$	8.0		V
$V_{CE(SAT)}$	$I_C=500\text{mA}, I_B=50\text{mA}$		0.2	V
$V_{CE(SAT)}$	$I_C=2.0\text{A}, I_B=200\text{mA}$		1.5	V
$V_{BE(ON)}$	$V_{CE}=5.0\text{V}, I_C=500\text{mA}$		1.2	V
$h_{FE}$	$V_{CE}=5.0\text{V}, I_C=500\text{mA}$	50	150	
$h_{FE}$	$V_{CE}=5.0\text{V}, I_C=2.0\text{A}$	15		
$f_T$	$V_{CE}=20\text{V}, I_C=100\text{mA}$	50		MHz
$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		50	pF
$t_{on}$	$V_{CC}=30\text{V}, I_C=1.0\text{A}, I_{B1}=I_{B2}=100\text{mA}$	0.3 TYP		$\mu\text{s}$
$t_{off}$	$V_{CC}=30\text{V}, I_C=1.0\text{A}, I_{B1}=I_{B2}=100\text{mA}$		1.7	$\mu\text{s}$

**Central™**  
**Semiconductor Corp.**

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



LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

[LittleDiode.com](http://LittleDiode.com)

Looking forward to providing you with the best possible service.