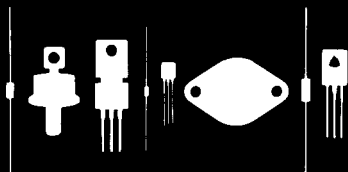


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 Rev. 001
 Central
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145 Adams Avenue
 Hauppauge, New York 11788



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°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°C)	P _D	4.0	W
Operating and Storage			
Junction Temperature	T _J , T _{stg}	-65 to +200	°C
Thermal Resistance	θ _{JC}	25	°C/W

ELECTRICAL CHARACTERISTICS (T_C=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I _{CB0}	V _{CB} =60V		100	nA
I _{CEV}	V _{CE} =140V, V _{EB} =0.5V		10	μA
I _{CE0}	V _{CE} =60V		10	μA
I _{EB0}	V _{EB} =8.0V		10	μA
BV _{CB0}	I _C =1.0mA	140		V
BV _{CE0}	I _C =10mA	120		V
BV _{EB0}	I _E =10μA	8.0		V
V _{CE} (SAT)	I _C =500mA, I _B =50mA		0.2	V
V _{CE} (SAT)	I _C =2.0A, I _B =200mA		1.5	V
V _{BE} (ON)	V _{CE} =5.0V, I _C =500mA		1.2	V
h _{FE}	V _{CE} =5.0V, I _C =500mA	50	150	
h _{FE}	V _{CE} =5.0V, I _C =2.0A	15		
f _T	V _{CE} =20V, I _C =100mA	50		MHz
C _{ob}	V _{CB} =10V, I _E =0, f=1.0MHz		50	pF
t _{on}	V _{CC} =30V, I _C =1.0A, I _{B1} =I _{B2} =100mA	0.3	TYP	μs
t _{off}	V _{CC} =30V, I _C =1.0A, I _{B1} =I _{B2} =100mA		1.7	μs

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