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**Silicon PNP Power Transistor****2N6246****DESCRIPTION**

- Excellent Safe Operating Area
- High DC Current Gain-  
:  $h_{FE} = 20-100(\text{Min}) @ I_C = -7A$
- Low Saturation Voltage-  
:  $V_{CE(\text{sat})} = -1.3V(\text{Max}) @ I_C = -7A$

**APPLICATIONS**

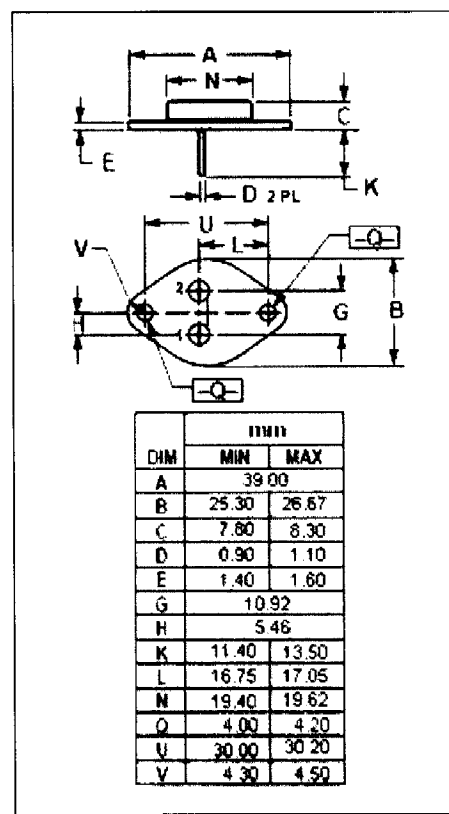
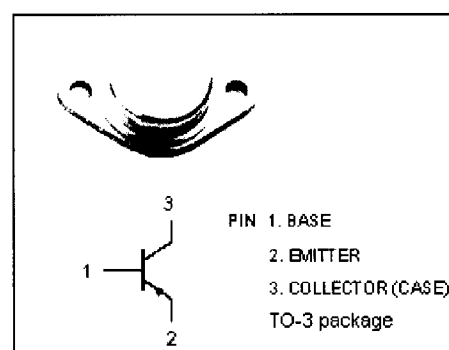
- Designed for general-purpose switching and linear amplifier applications.

**ABSOLUTE MAXIMUM RATINGS( $T_a = 25^\circ\text{C}$ )**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-70	V
$V_{CER}$	Collector-Emitter Voltage $R_{BE} = 100 \Omega$	-70	V
$V_{CEO}$	Collector-Emitter Voltage	-60	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-15	A
$I_B$	Base Current-Continuous	-5	A
$P_C$	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	125	W
$T_J$	Junction Temperature	200	$^\circ\text{C}$
$T_{\text{stg}}$	Storage Temperature	-65~200	$^\circ\text{C}$

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{\text{th } j-c}$	Thermal Resistance, Junction to Case	1.4	$^\circ\text{C/W}$



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.



**Quality Semi-Conductors**

**Silicon PNP Power Transistor****2N6246****ELECTRICAL CHARACTERISTICS** **$T_C=25^\circ\text{C}$  unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C = -200\text{mA}; I_B = 0$	-60		V
$V_{CER(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C = -200\text{mA}; R_{BE} = 100\ \Omega$	-70		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C = -7\text{A}; I_B = -0.7\text{A}$		-1.3	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C = -15\text{A}; I_B = -3\text{A}$		-2.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -7\text{A}; V_{CE} = -4\text{V}$		-2.0	V
$I_{CEO}$	Collector Cutoff Current	$V_{CE} = -30\text{V}; I_B = 0$		-1.0	mA
$I_{CER}$	Collector Cutoff Current	$V_{CE} = -55\text{V}; R_{BE} = 100\ \Omega$		-0.2	mA
$I_{CEX}$	Collector Cutoff Current	$V_{CE} = -65\text{V}; V_{BE(off)} = -1.5\text{V}$ $V_{CE} = -55\text{V}; V_{BE(off)} = -1.5\text{V}; T_C = 150^\circ\text{C}$		-0.2 -5.0	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -5\text{V}; I_C = 0$		-5.0	mA
$h_{FE-1}$	DC Current Gain	$I_C = -7\text{A}; V_{CE} = -4\text{V}$	20	100	
$h_{FE-2}$	DC Current Gain	$I_C = -15\text{A}; V_{CE} = -4\text{V}$	5		