

**Silicon PNP Power Transistors**

**2N5737**

**DESCRIPTION**

- Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(SUS)} = -60V(\text{Min.})$
- Low Collector Saturation Voltage-  
:  $V_{CE(sat)} = -0.5V(\text{Max.}) @ I_C = -5A$
- Wide Area of Safe Operation

**APPLICATIONS**

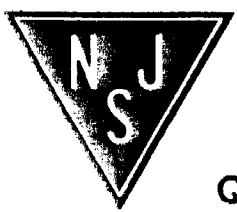
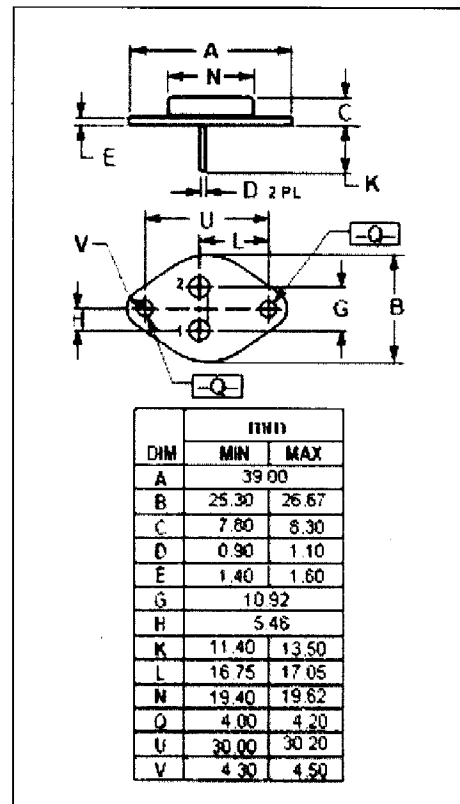
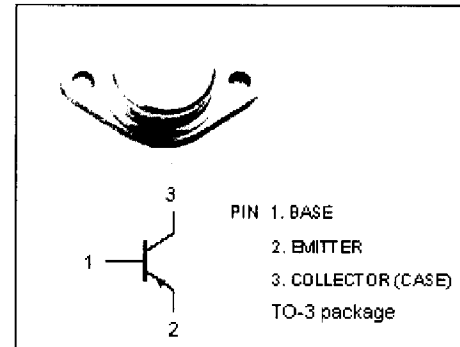
- Designed for general-purpose power amplifier and switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-60	V
$V_{CEO}$	Collector-Emitter Voltage	-60	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-10	A
$I_{CM}$	Collector Current-Peak	-20	A
$I_B$	Base Current-Continuous	-4	A
$P_C$	Collector Power Dissipation @ $T_C=100^\circ\text{C}$	50	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-65~200	$^\circ\text{C}$

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	0.5	$^\circ\text{C/W}$



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### 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
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C = -5\text{A}$ ; $I_B = -0.5\text{A}$		-0.5	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C = -10\text{A}$ ; $I_B = -2.5\text{A}$		-3.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -5\text{A}$ ; $I_B = -0.5\text{A}$		-1.2	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -4\text{A}$ ; $V_{CE} = -4\text{V}$		-1.5	V
$I_{CEO}$	Collector Cutoff Current	$V_{CE} = -60\text{V}$ ; $I_B = 0$		-0.5	mA
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -60\text{V}$ ; $I_E = 0$		-0.1	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -5\text{V}$ ; $I_C = 0$		-0.1	mA
$h_{FE-1}$	DC Current Gain	$I_C = -5\text{A}$ ; $V_{CE} = -5\text{V}$	20	80	
$h_{FE-2}$	DC Current Gain	$I_C = -10\text{A}$ ; $V_{CE} = -5\text{V}$	4		
$f_T$	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}$ ; $V_{CE} = -10\text{V}$	10		MHz