

**Silicon PNP Power Transistor**

**2SA1227**

**DESCRIPTION**

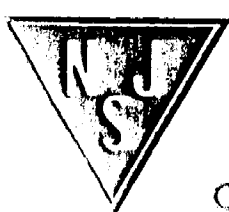
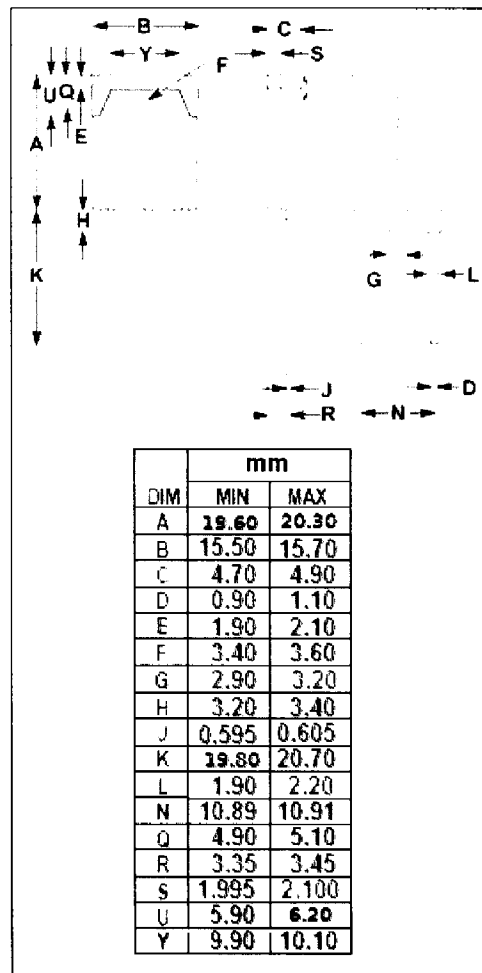
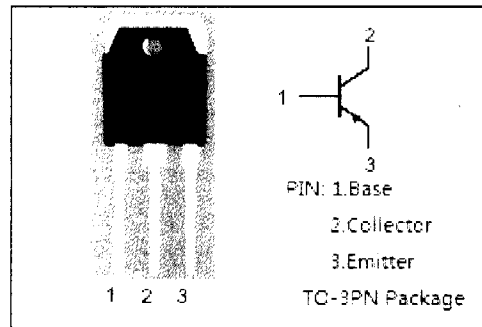
- Collector-Emitter Breakdown Voltage-  
 :  $V_{(BR)CEO} = -140V(\text{Min})$
- Good Linearity of  $h_{FE}$
- Complement to Type 2SC2987

**APPLICATIONS**

- For audio frequency power amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-140	V
$V_{CEO}$	Collector-Emitter Voltage	-140	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-12	A
$I_{CM}$	Collector Current-Peak	-20	A
$P_C$	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	120	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



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## ELECTRICAL CHARACTERISTICS

$T_C=25^\circ\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -5.0\text{A}; I_B = -0.5\text{A}$			-1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -5.0\text{A}; I_B = -0.5\text{A}$			-2.0	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB} = -140\text{V}; I_E = 0$			-50	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = -3\text{V}; I_C = 0$			-50	$\mu\text{A}$
$h_{FE-1}$	DC Current Gain	$I_C = -2\text{A}; V_{CE} = -5\text{V}$	60		320	
$h_{FE-2}$	DC Current Gain	$I_C = -5\text{A}; V_{CE} = -5\text{V}$	40			
$C_{OB}$	Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f = 1.0\text{MHz}$		280		pF
$f_T$	Current-Gain—Bandwidth Product	$I_C = -1\text{A}; V_{CE} = -5\text{V}$		60		MHz

### ◆ $h_{FE-1}$ Classifications

R	Q	P
60-120	100-200	160-320