

Silicon PNP Power Transistor

2SB1566

DESCRIPTION

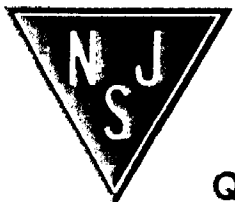
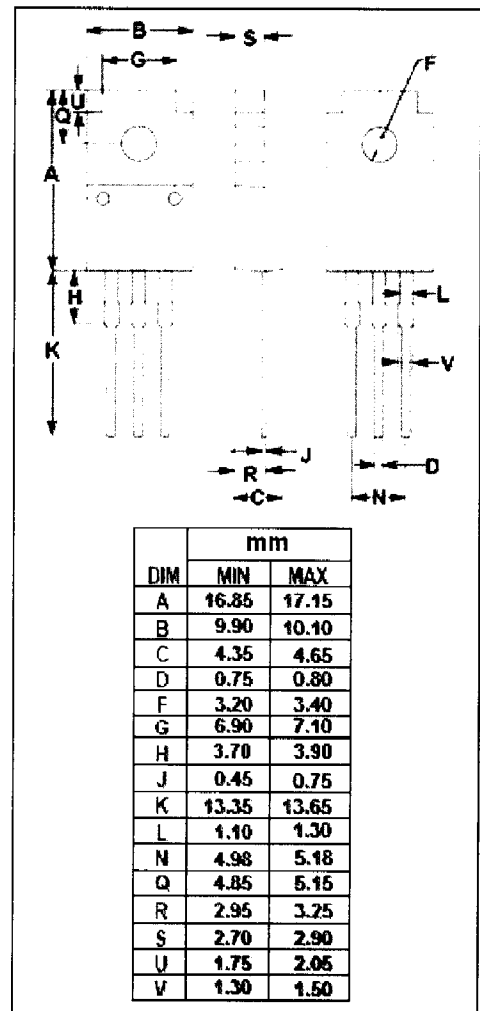
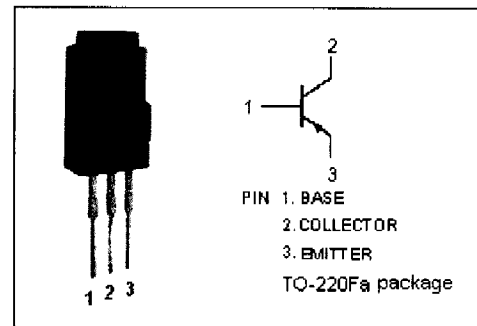
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -50V(\text{Min})$
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = -1.0V(\text{Max}) @ (I_C = -2A, I_B = -0.2A)$
- Wide Area of Safe Operation
- Complement to Type 2SD2395

APPLICATIONS

- Designed for power amplifications.

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	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-3	A
I_{CM}	Collector Current-Peak	-4.5	A
P_C	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	2	W
	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	25	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -1\text{mA}; I_B = 0$	-50			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C = -50\ \mu\text{A}; I_E = 0$	-60			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -50\ \mu\text{A}; I_C = 0$	-7			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -2\text{A}; I_B = -0.2\text{A}$			-1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -2\text{A}; I_B = -0.2\text{A}$			-1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -60\text{V}; I_E = 0$			-10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -7\text{V}; I_C = 0$			-10	μA
h_{FE}	DC Current Gain	$I_C = -0.5\text{A}; V_{CE} = -3\text{V}$	100		320	
f_T	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}; V_{CE} = -5\text{V}; f_{test} = 5\text{MHz}$		60		MHz
C_{OB}	Collector Output Capacitance	$I_E = 0; V_{CE} = -10\text{V}; f_{test} = 1\text{MHz}$		40		pF

◆ h_{FE} Classifications

E	F
100-200	160-320