

Silicon PNP Power Transistor

2SA505

DESCRIPTION

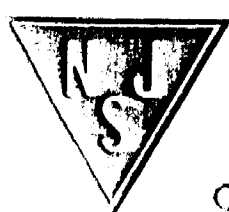
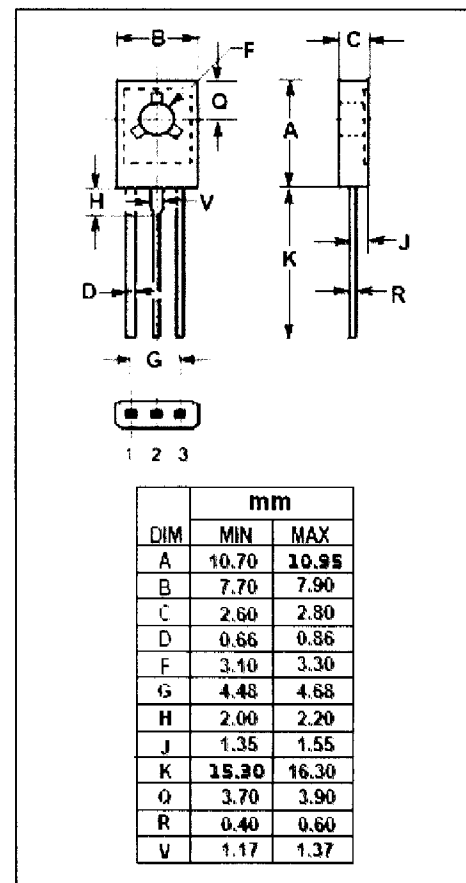
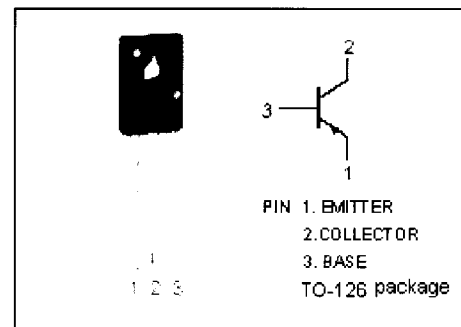
- Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = -50V$ (Min.)
- Collector-Emitter Saturation Voltage-
 $V_{CE(sat)} = -0.8V$ (Max.) @ $I_C = -500mA$

APPLICATIONS

- Designed for medium power amplifier applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5.0	V
I_C	Collector Current-Continuous	-1	A
I_E	Emitter Current-Continuous	1	A
P_C	Collector Power Dissipation	1	W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-55~150	°C



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -10\text{mA}; I_B = 0$	-50			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E = -1\text{mA}; I_C = 0$	-5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -500\text{mA}; I_B = -50\text{mA}$			-0.8	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -500\text{mA}; V_{CE} = -2\text{V}$			-1.3	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -30\text{V}; I_E = 0$			-1.0	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -5\text{V}; I_C = 0$			-1.0	μA
h_{FE-1}	DC Current Gain	$I_C = -50\text{mA}; V_{CE} = -2\text{V}$	40		240	
h_{FE-2}	DC Current Gain	$I_C = -800\text{mA}; V_{CE} = -2\text{V}$	13			
f_T	Current-Gain—Bandwidth Product	$I_C = -10\text{mA}; V_{CE} = -10\text{V}$		100		MHz
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f = 1.0\text{MHz}$		20		pF

◆ h_{FE-1} Classifications

R	O	Y
40-80	70-140	120-240