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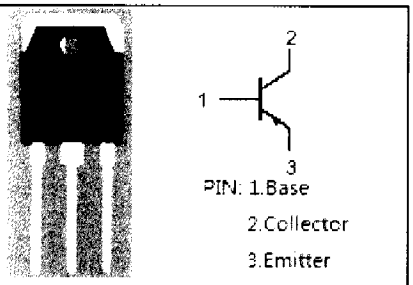
Silicon PNP Power Transistor — 2SA1205



DESCRIPTION

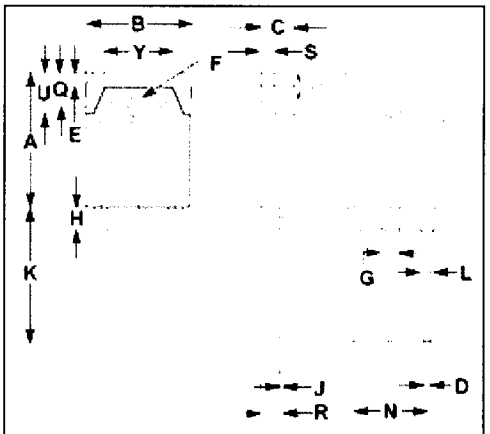
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= -50V(Min)
- Low Collector Saturation Voltage-
  : $V_{CE(sat)}$= -0.5V(Max.)@ I_C= -5A

APPLICATIONS

- For audio and general purpose applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-70	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-12	A
I_B	Base Current-Continuous	-4	A
P_C	Collector Power Dissipation @ T_C=25℃	100	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃



DIM	mm MIN	mm MAX
A	19.60	20.30
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	19.80	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -25mA; I_B= 0	-50			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -5.0A; I_B= -0.12A			-0.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -70V; I_E= 0			-100	μ A
I_{EBO}	Emitter Cutoff Current	V_{EB}= -6V; I_C= 0			-100	μ A
h_{FE}	DC Current Gain	I_C= -5A; V_{CE}= -0.5V	40			
f_T	Current-Gain—Bandwidth Product	I_E= 3A ; V_{CE}= -12V		20		MHz

Switching times

t_{on}	Turn-on Time	I_C= -5A; R_L= 4Ω , I_{B1}= -I_{B2}= -0.12A; V_{CC}= -20V		0.6		μ s
t_{stg}	Storage Time			0.5		μ s
t_f	Fall Time			0.25		μ s