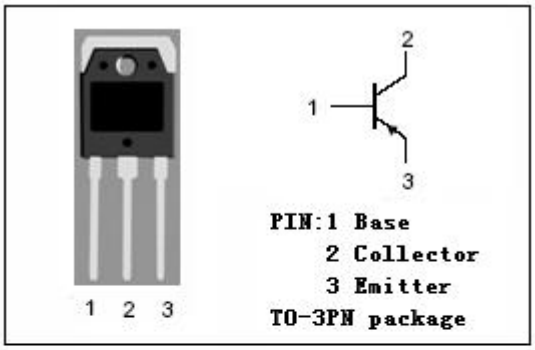
SPTECH Silicon PNP Power Transistor

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= -140V(Min)
- Good Linearity of h_{FE}
- High Current Capability
- Wide Area of Safe Operation
- Complement to Type 2SD1047

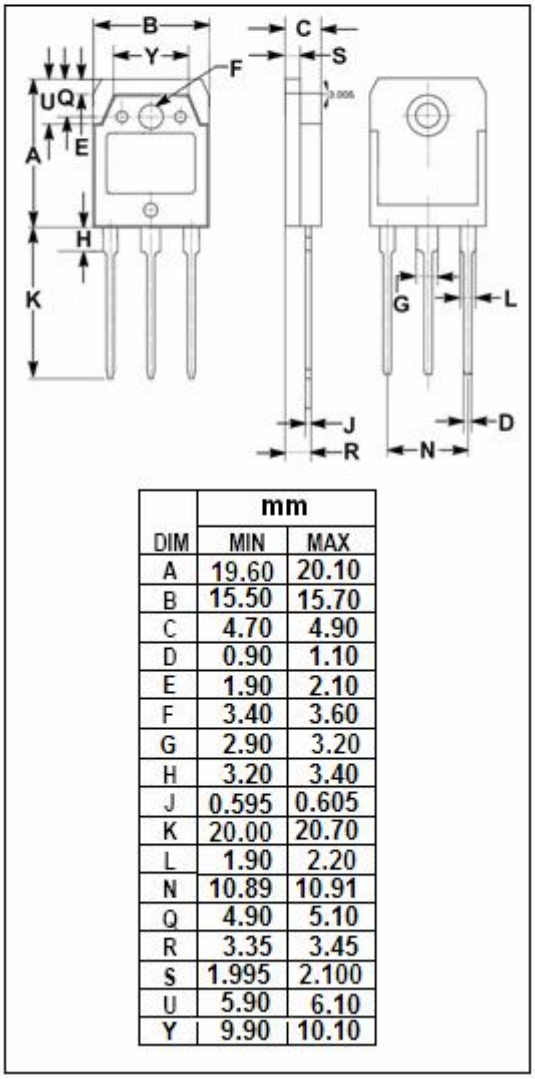


APPLICATIONS

- Recommend for 60W audio frequency amplifier output stage applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-140	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-12	A
I_{CP}	Collector Current-Pulse	-15	A
P_C	Collector Power Dissipation @ T_C=25℃	100	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-40~150	℃



DIM	mm MIN	mm MAX
A	19.60	20.10
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	20.00	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	6.10
Y	9.90	10.10

SPTECH Silicon PNP Power Transistor

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -30mA ; R_{BE}=∞	-140			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= -5mA; I_E= 0	-160			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= -5mA; I_C= 0	-6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -5.0A; I_B= -0.5A			-2.5	V
$V_{BE(on)}$	Base -Emitter On Voltage	I_C= -1A ; V_{CE}= -5V			-1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -80V ; I_E=0			-100	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -4V; I_C=0			-100	μA
h_{FE-1}	DC Current Gain	I_C= -1A ; V_{CE}= -5V	60		200	
h_{FE-2}	DC Current Gain	I_C= -6A ; V_{CE}= -5V	20			
C_{OB}	Output Capacitance	I_E=0 ; V_{CB}= -10V;f_{test}= 1.0MHz		300		pF
f_T	Current-Gain—Bandwidth Product	I_C=-1A ; V_{CE}= -5V		15		MHz
Switching times						
t_{on}	Turn-on Time	I_C= -1A ,R_L= 20Ω , I_{B1}= -I_{B2}= -0.1A,V_{CC}=-20V		0.25		μs
t_{stg}	Storage Time			1.61		μs
t_f	Fall Time			0.53		μs

◆ **h_{FE-1} Classifications**

D	E
60-120	100-200