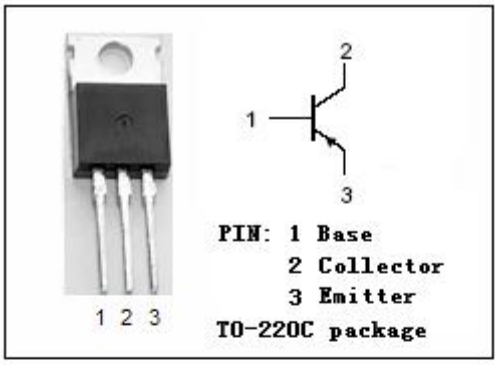
SPTECH Silicon PNP Power Transistor

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= -60V(Min)
- Low Collector-Emitter Saturation Voltage-
  : $V_{CE(sat)}$= -1.0V(Max) @I_C= -3.0A
- Complementary to 2SD880



APPLICATIONS

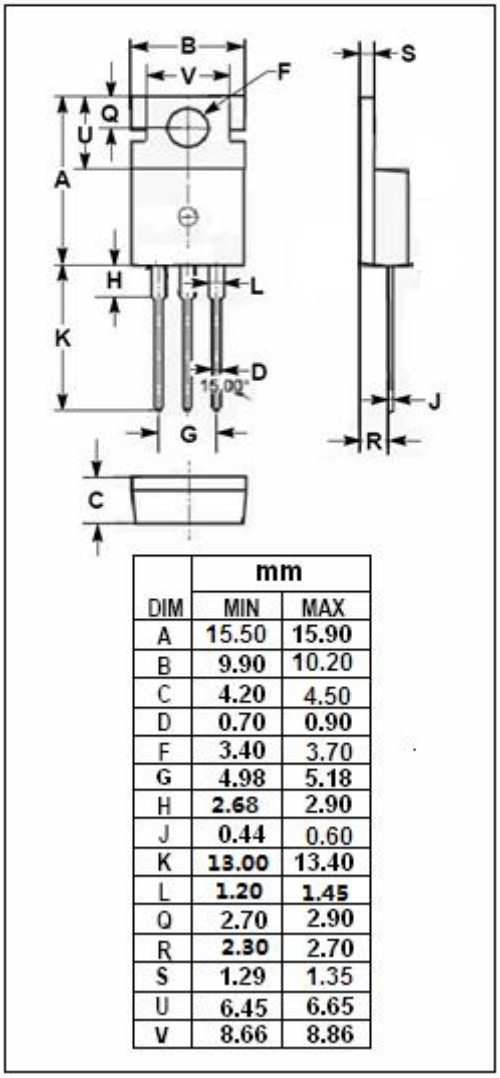
- Designed for use in audio frequency power amplifier applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-3.0	A
I_B	Base Current-Continuous	-0.5	A
P_C	Collector Power Dissipation @ T_C=25℃	30	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	4.16	℃/W



DIM	mm MIN	MAX
A	15.50	15.90
B	9.90	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	13.00	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

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= -50mA; I_B= 0		-60			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -3.0A; I_B= -0.3A				-1.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= -0.5A; V_{CE}= -5V				-1.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -60V; I_E= 0				-100	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -7V; I_C= 0				-100	μA
h_{FE}	DC Current Gain	I_C= -500mA; V_{CE}= -5V	R	60		120	
			O	100		200	
C_{OB}	Collector Output Capacitance	I_E= 0; V_{CB}= -10V; f= 1MHz			150		pF
f_T	Current-Gain—Bandwidth Product	I_C= -0.5A; V_{CE}= -5V			9		MHz

Switching times

t_{on}	Turn-on Time	I_C= -2A, I_{B1}= -I_{B2}= -0.2A R_L = 15Ω; V_{CC}= -30V		0.4		μs
t_{stg}	Storage Time			1.7		μs
t_f	Fall Time			0.5		μs

◆ h_{FE} Classifications

O	Y
60-120	100-200