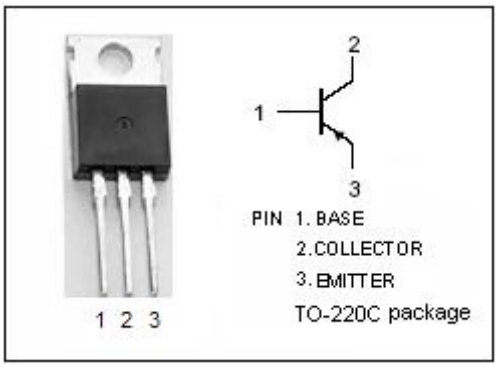
SPTECH Silicon PNP Power Transistors

DESCRIPTION

- Good Linearity of h_{FE}
- High Collector-Emitter Breakdown Voltage-
  $V_{(BR)CEO}$= -160V(Min)-2SA1306
  = -180V(Min)-2SA1306A
  = -200V(Min)-2SA1306B
- Complement to Type 2SC3298/A/B

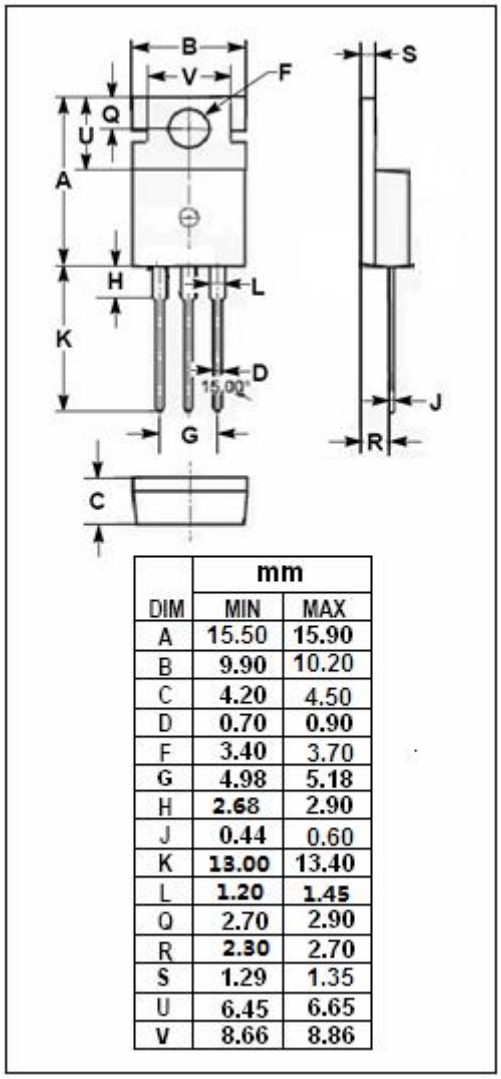


APPLICATIONS

- Power amplifier applications.
- Driver stage amplifier applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER		VALUE	UNIT
V_{CBO}	Collector-Base Voltage	2SA1306	-160	V
		2SA1306A	-180	
		2SA1306B	-200	
V_{CEO}	Collector-Emitter Voltage	2SA1306	-160	V
		2SA1306A	-180	
		2SA1306B	-200	
V_{EBO}	Emitter-Base Voltage		-5	V
I_C	Collector Current-Continuous		-1.5	A
I_B	Base Current-Continuous		-0.15	A
P_C	Collector Power Dissipation @ T_C=25℃		20	W
T_J	Junction Temperature		150	℃
T_{stg}	Storage Temperature Range		-55~150	℃



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 Transistors

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	2SA1306	I_C= -10mA; I_B= 0	-160			V
		2SA1306A		-180			
		2SA1306B		-200			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage		I_C= -500mA; I_B= -50mA			-1.5	V
$V_{BE(on)}$	Base-Emitter On Voltage		I_C= -500mA; V_{CE}= -5V			-1.0	V
I_{CBO}	Collector Cutoff Current		V_{CB}= -160V; I_E= 0			-1.0	μA
I_{EBO}	Emitter Cutoff Current		V_{EB}= -5V; I_C=0			-1.0	μA
h_{FE}	DC Current Gain		I_C= -100mA ; V_{CE}= -5V	70		240	
f_T	Current-Gain—Bandwidth Product		I_C= -100mA ; V_{CE}= -10V		100		MHz
C_{OB}	Output Capacitance		I_E= 0 ; V_{CB}= -10V;f_{test}= 1.0MHz		30		pF

◆ **h_{FE} Classifications**

O	Y
70-140	120-240