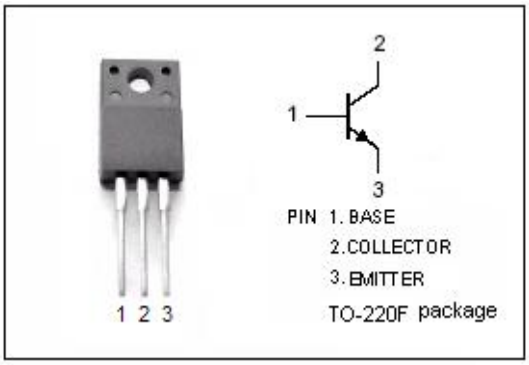
SPTECH Silicon NPN Power Transistors

DESCRIPTION

- Good Linearity of h_{FE}
- High Collector-Emitter Breakdown Voltage-
  $V_{(BR)CEO}$= 160V(Min)-2SC3298
  = 180V(Min)-2SC3298A
  = 200V(Min)-2SC3298B
- Complement to Type 2SA1306/A/B

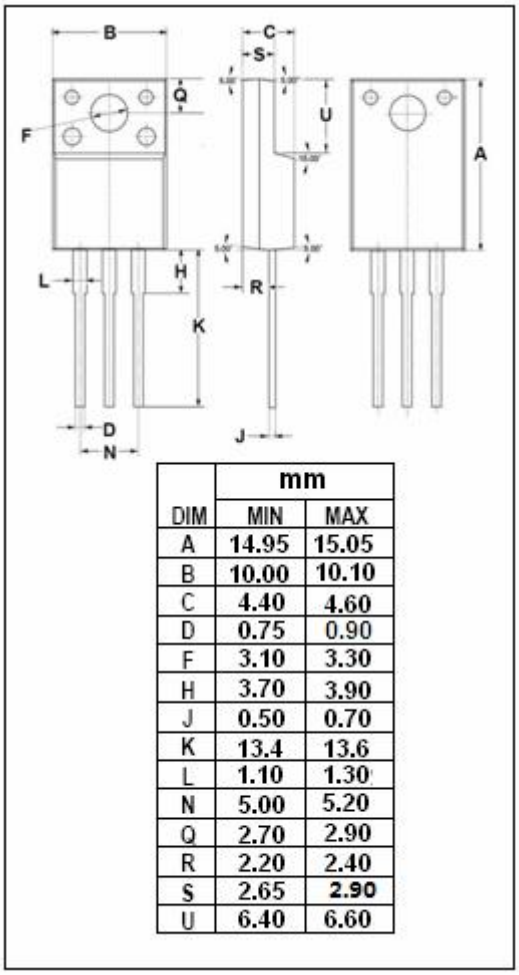


APPLICATIONS

- Power amplifier applications.
- Driver stage amplifier applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER		VALUE	UNIT
V_{CBO}	Collector-Base Voltage	2SC3298	160	V
		2SC3298A	180	
		2SC3298B	200	
V_{CEO}	Collector-Emitter Voltage	2SC3298	160	V
		2SC3298A	180	
		2SC3298B	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	14.95	15.05
B	10.00	10.10
C	4.40	4.60
D	0.75	0.90
F	3.10	3.30
H	3.70	3.90
J	0.50	0.70
K	13.4	13.6
L	1.10	1.30
N	5.00	5.20
Q	2.70	2.90
R	2.20	2.40
S	2.65	2.90
U	6.40	6.60

SPTECH Silicon NPN Power Transistors

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	2SC3298	I_C= 10mA; I_B= 0	160			V
		2SC3298A		180			
		2SC3298B		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		25		pF

◆ **h_{FE} Classifications**

O	Y
70-140	120-240