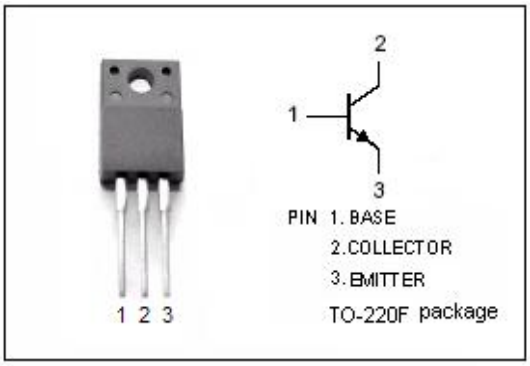
isc Silicon NPN Power Transistors — 2SC3298/A/B

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
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

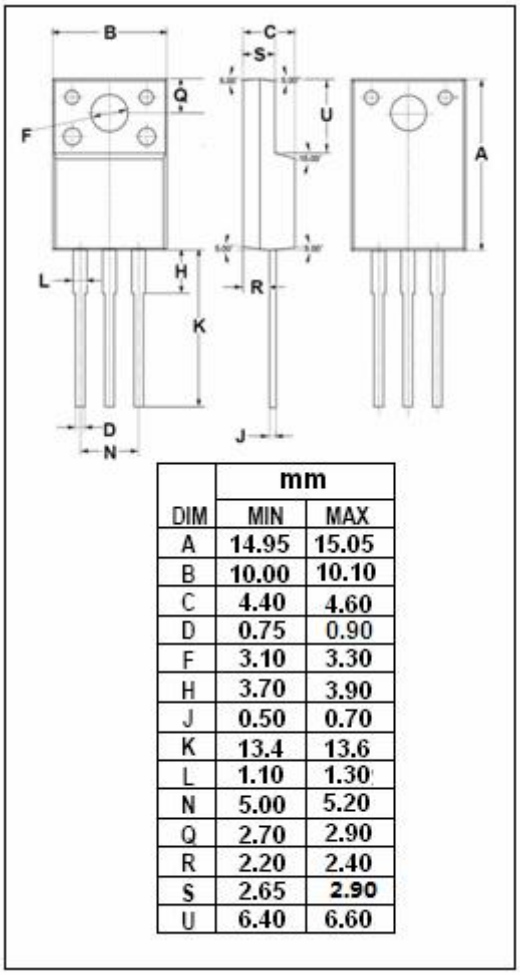


APPLICATIONS

- 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

isc Silicon NPN Power Transistors 2SC3298/A/B

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

NOTICE:

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.