

isc Silicon NPN Power Transistors

2SC3298/A

**DESCRIPTION**

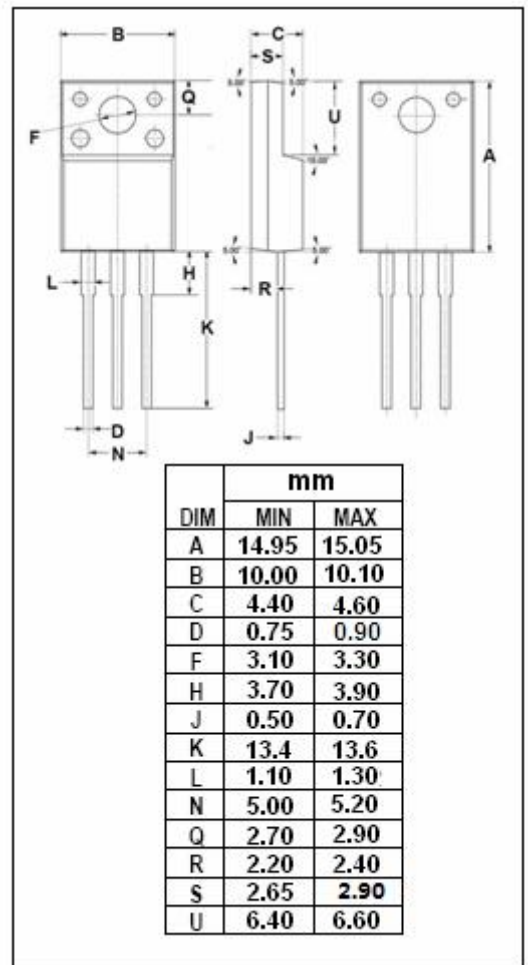
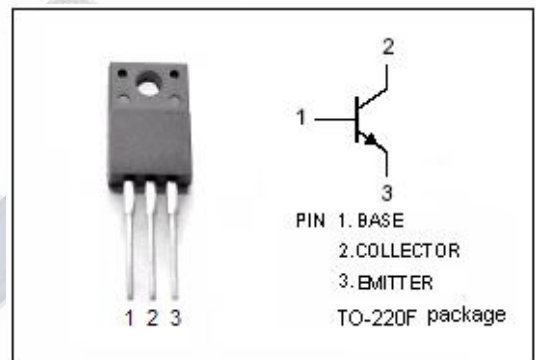
- Good Linearity of  $h_{FE}$
- High Collector-Emitter Breakdown Voltage-  
 $V_{(BR)CEO} = 160V(\text{Min})-2SC3298$   
 $= 180V(\text{Min})-2SC3298A$
- Complement to Type 2SA1306/A
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Power amplifier applications.
- Driver stage amplifier applications.

**ABSOLUTE MAXIMUM RATINGS(Ta=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	2SC3298	160
		2SC3298A	180
$V_{CEO}$	Collector-Emitter Voltage	2SC3298	160
		2SC3298A	180
$V_{EBO}$	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 @ $T_C=25^\circ C$	20	W
$T_J$	Junction Temperature	150	°C
$T_{stg}$	Storage Temperature Range	-55~150	°C



**isc Silicon NPN Power Transistors****2SC3298/A****ELECTRICAL CHARACTERISTICS** $T_c=25^\circ\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	2SC3298	$I_C=10\text{mA}; I_B=0$			V
		2SC3298A				
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=500\text{mA}; I_B=50\text{mA}$			1.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C=500\text{mA}; V_{CE}=5\text{V}$			1.0	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=160\text{V}; I_E=0$			1.0	$\mu\text{A}$
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}=5\text{V}; I_C=0$			1.0	$\mu\text{A}$
$h_{FE}$	DC Current Gain	$I_C=100\text{mA}; V_{CE}=5\text{V}$	70		240	
$f_T$	Current-Gain—Bandwidth Product	$I_C=100\text{mA}; V_{CE}=10\text{V}$		100		MHz
$C_{OB}$	Output Capacitance	$I_E=0; V_{CB}=10\text{V}; f_{test}=1.0\text{MHz}$		25		pF

◆  **$h_{FE}$  Classifications**

O	Y
70-140	120-240