

# 2SC5198

## Transistor Silicon NPN Epitaxial Type

Power Amplifier Applications

### FEATURES

- \* High collector voltage:  $V_{ce0}=140V(\text{min})$
- \* Recommended for 70W high-fidelity audio  
Frequency amplifier output
- \* Complementary to 2SA1941



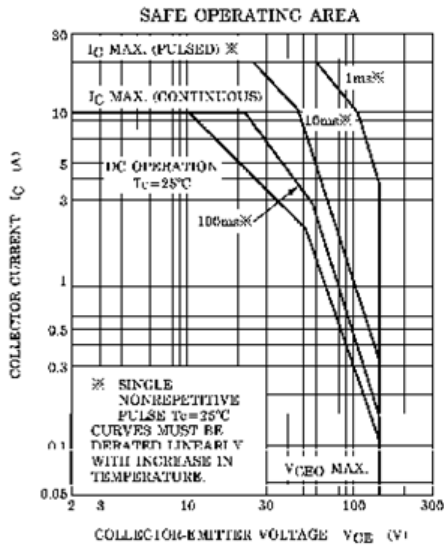
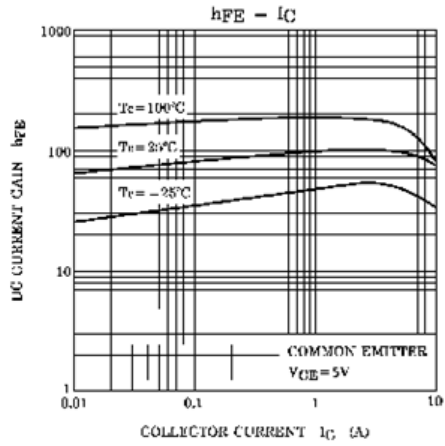
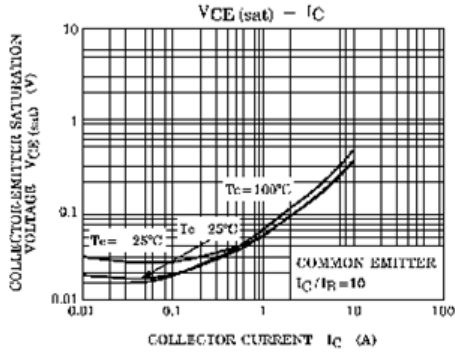
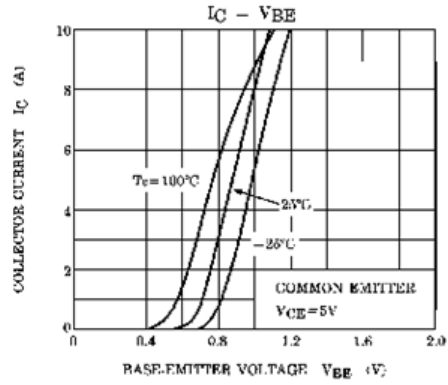
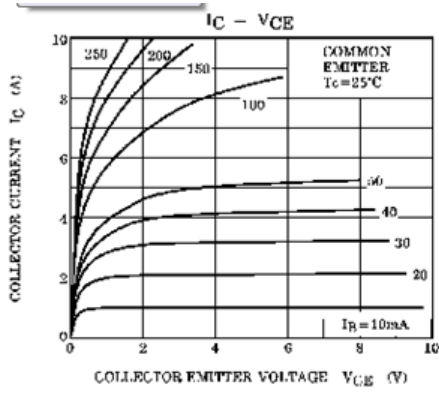
### MAXIMUM RATINGS (Ta=25°C)

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CBO}$	140	V
Collector-Emitter Voltage	$V_{CEO}$	140	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector current	$I_C$	10	A
Base current	$I_B$	1	A
Collector Power Dissipation	$P_C$	100	W
Junction Temperature	$T_J$	150	°C
Collector-Base Voltage	$T_{stg}$	-55to+150	°C

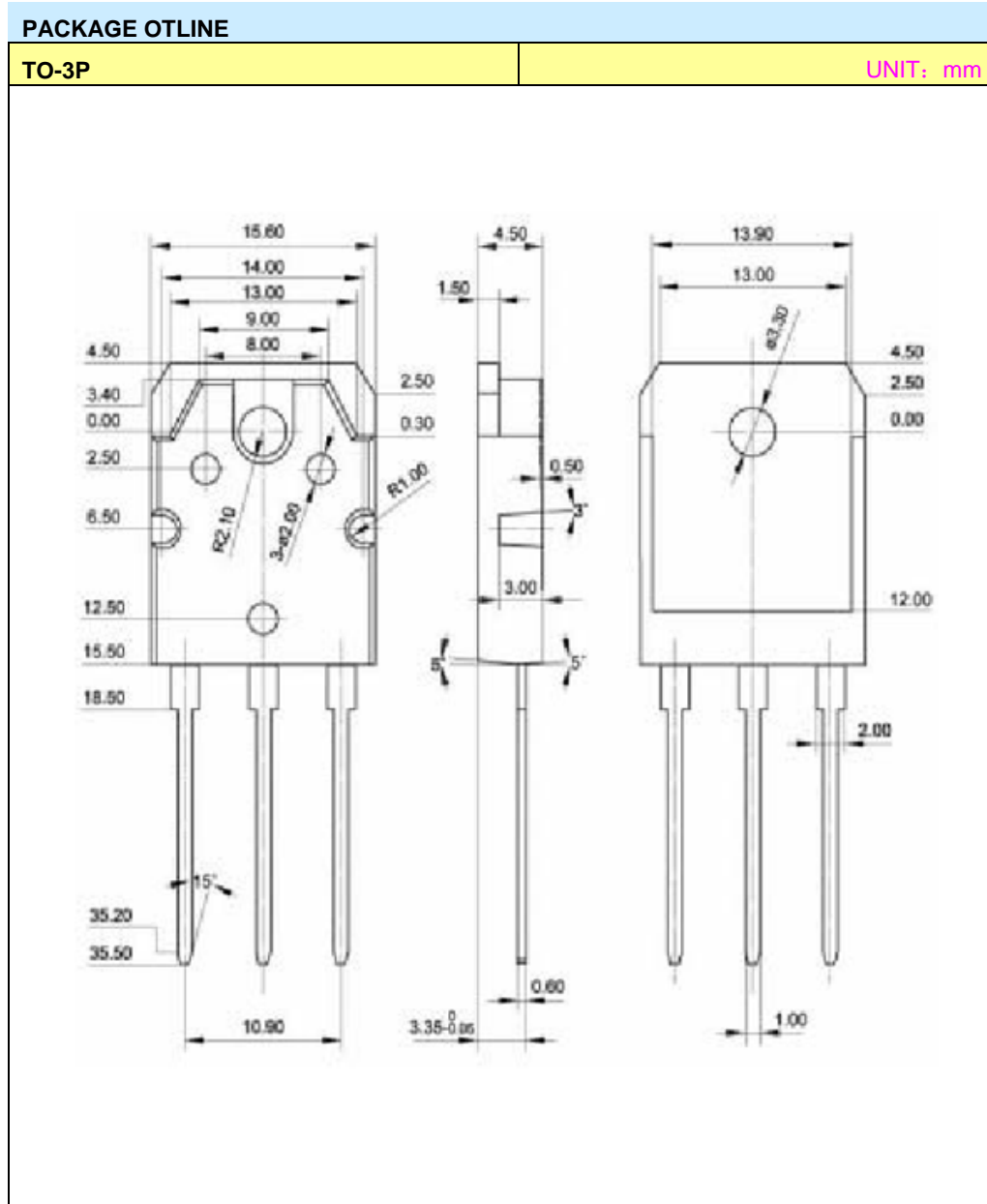
### ELECTRICAL CHARACTERISTICS (Ta=25°C)

Characteristics	Symbol	Test conditions	Min	Typ	Max.	Unit
Collector Cut-off Current	$I_{CBO}$	$V_{cb}=-140V, I_e=0$			5.0	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{eb}=-5V, I_c=0$			5.0	$\mu A$
Collector-Emitter Breakdown Voltage	$V_{CEO}$	$I_c=-50mA, I_b=0$	140			V
DC Current Gain	$h_{fe1}$	$V_{ce}=-5V, I_c=-1.0A$	55		160	
	$h_{fe2}$	$V_{ce}=-5V, I_c=-5A$	35			
Saturation Voltage	Collector- Emitter	$V_{CESAT}$			2.0	V
Base-Emitter Voltage	$V_{be}$	$V_{ce}=-5V, I_c=-5A$			1.5	V
Transition Frequency	$f_T$	$V_{ce}=-5V, I_c=-1A$		30		MHZ
Collector Output Capacitance	$C_{ob}$	$V_{ce}=-10V, I_e=0, f=1MHZ$		170		pF

TYPICAL PERFORMANCE CHARACTERISTICS



# 2SC5198



### ELECTROSTATIC DISCHARGE CAUTION



These devices have limited built-in ESD protection. The leads should be shorted together or the device placed in conductive foam during storage handling to prevent electrostatic damage to the device.

### NOTICE

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