2SC5198

Rev.E Mar.-2016

蓝箭电子 BLUE ROCKET ELECTRONICS

DATA SHEET

/ Descriptions

TO-3P NPN Silicon NPN transistor in a TO-3P Plastic Package.

/ Features

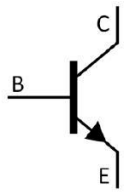
70W 2SA1941

Recommend for 70W high fidelity audio frequency amplifier output stage, Complementary to 2SA1941.

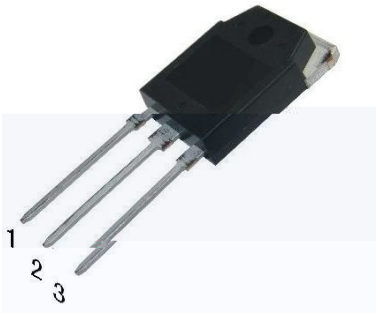
/ Applications

Power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

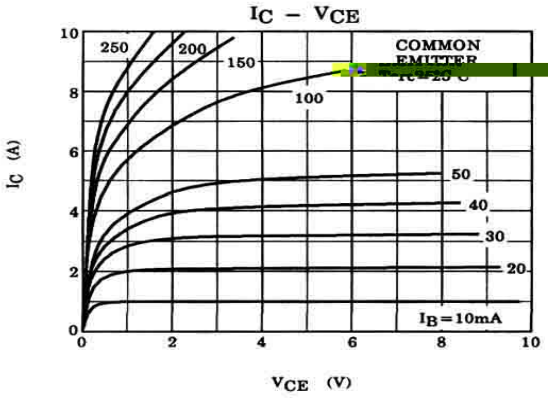
/ h_{FE} Classifications & Marking

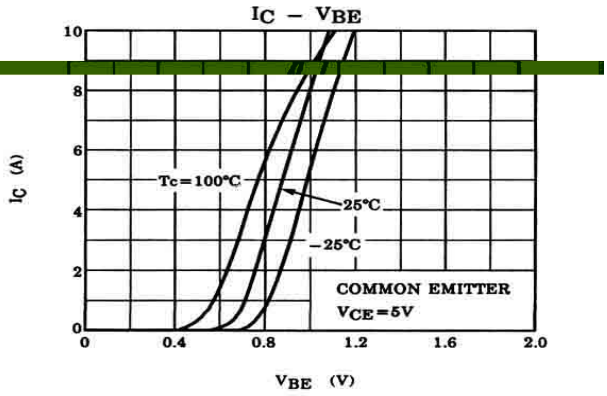
h_{FE} Classifications Symbol	R	O
h_{FE} Range	55~110	80~160

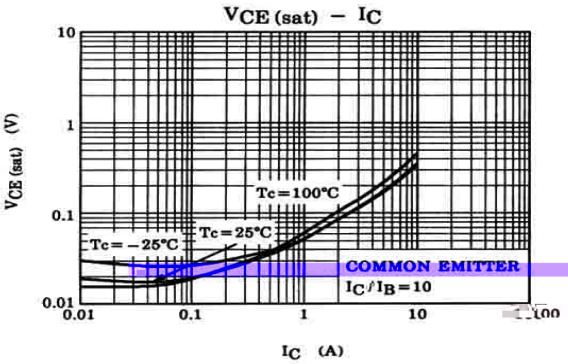
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	140	V
Collector to Emitter Voltage	V_{CEO}	140	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	10	A
Peak Collector Current	I_{CP}	20	A
Base Current	I_B	1.0	A
Collector Power Dissipation	$P_{C(TC=25\ )}$	100	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

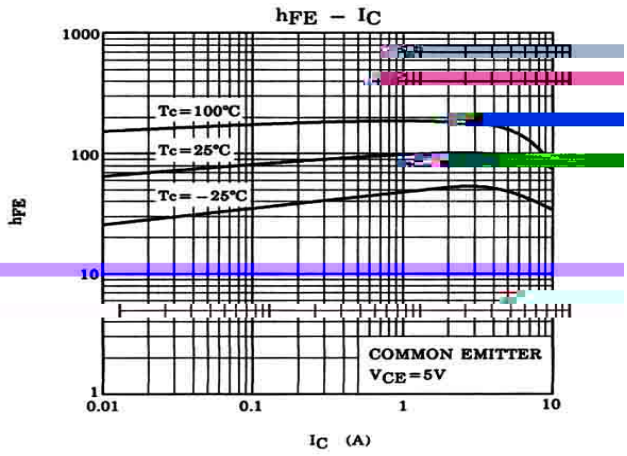
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CEO}	I_C=50mA I_B=0	140			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=140V I_E=0			5.0	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=5.0V I_C=0			5.0	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=5.0V I_C=1.0A	55		160	
	$h_{FE(2)}$	V_{CE}=5.0V I_C=5.0A	35	83		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=7.0A I_B=0.7A		0.3	2.0	V
Base to Emitter Voltage	V_{BE}	V_{CE}=5.0V I_C=5.0A		0.9	1.5	V
Transition Frequency	f_T	V_{CE}=5.0V I_C=1.0A		30		MHz

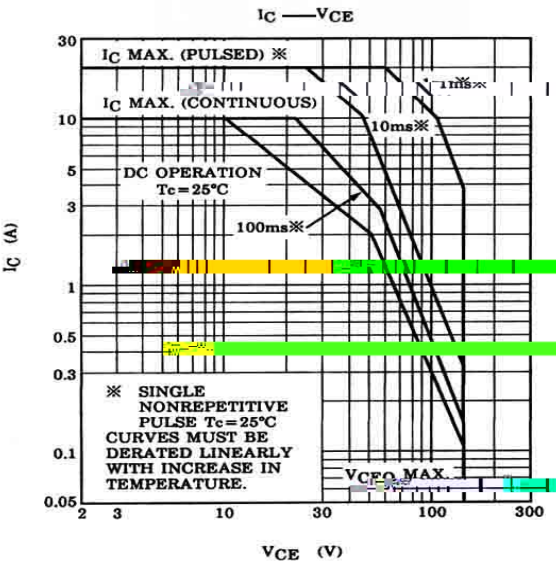
/ Electrical Characteristic Curve



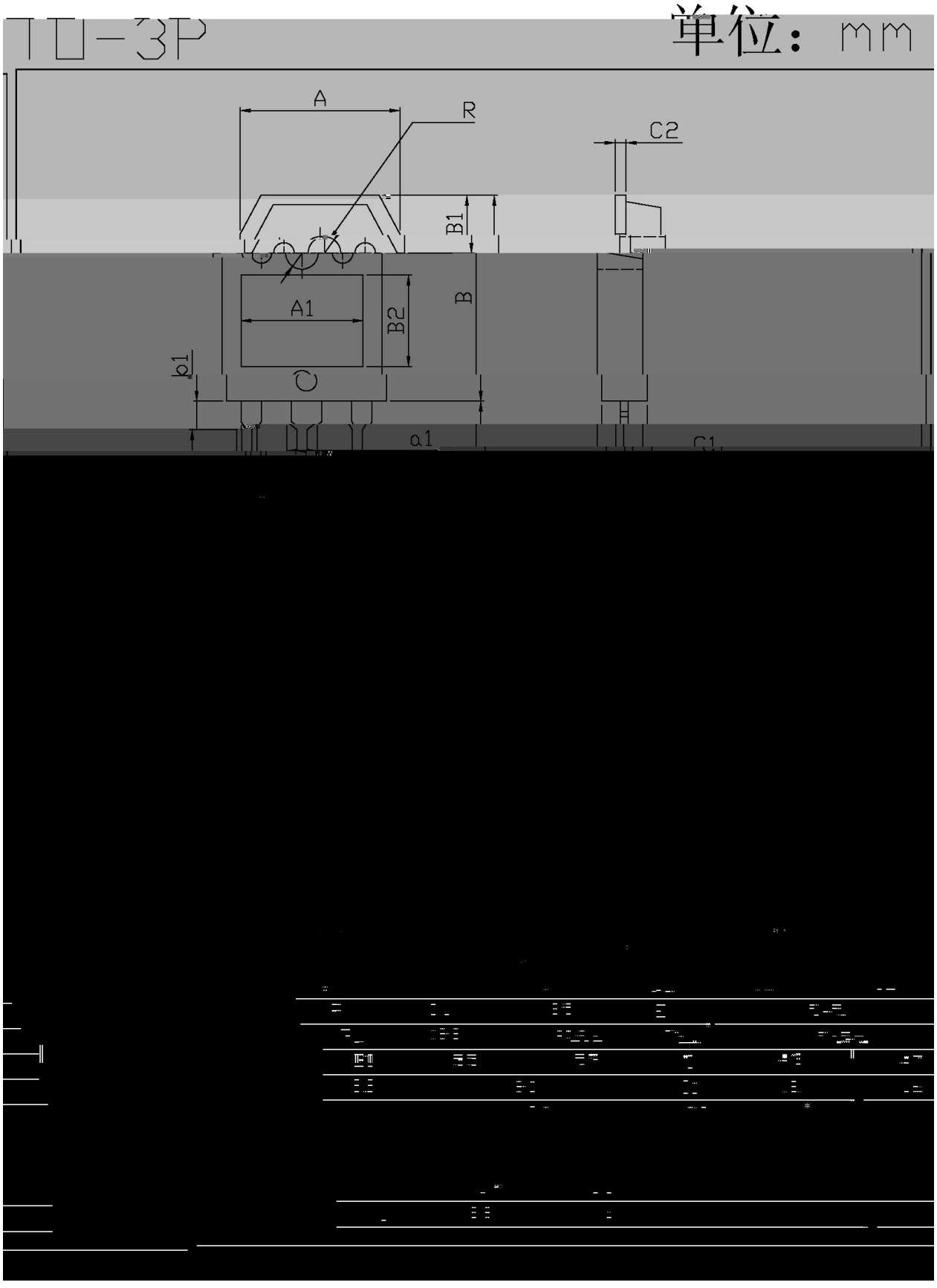




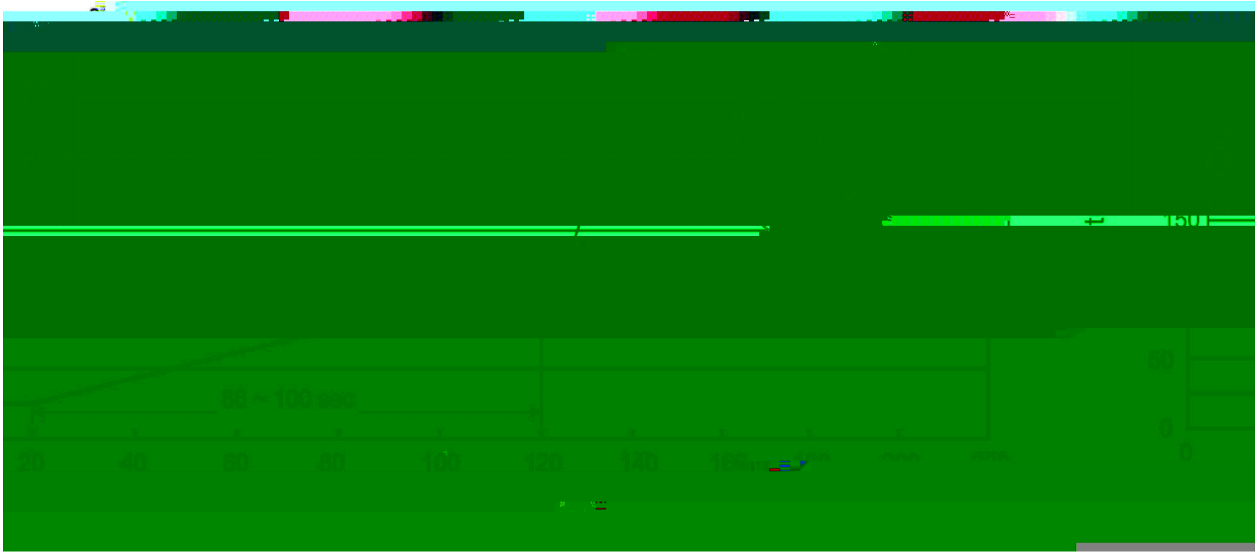




/ Package Dimensions



(　　) / Temperature Profile for Dip Soldering(Pb-Free)



Note:

1　　　25　150　　　60　90sec;

2　　　255±5　　　　5±0.5sec;

3　　　　　　2　10　/sec.

1.Preheating:25~150　, Time:60~90sec.

2.Peak Temp.:255±5　, Duration:5±0.5sec.

3. Cooling Speed: 2~10　/sec.

/ Resistance to Soldering Heat Test Conditions

270±5　　　10±1 sec.

Temp.:270±5　　　Time:10±1 sec

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