

/ Descriptions

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

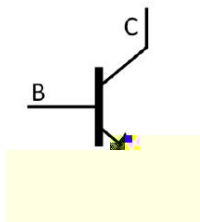
/ Features

100W NJW0302GC
Recommend for 100W high fidelity audio frequency amplifier output stage, Complementary to NJW0302GC.

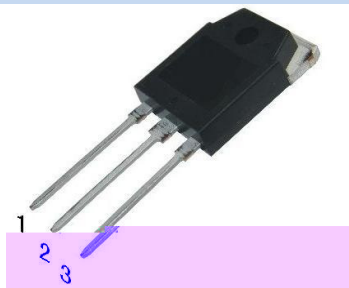
/ Applications

Power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

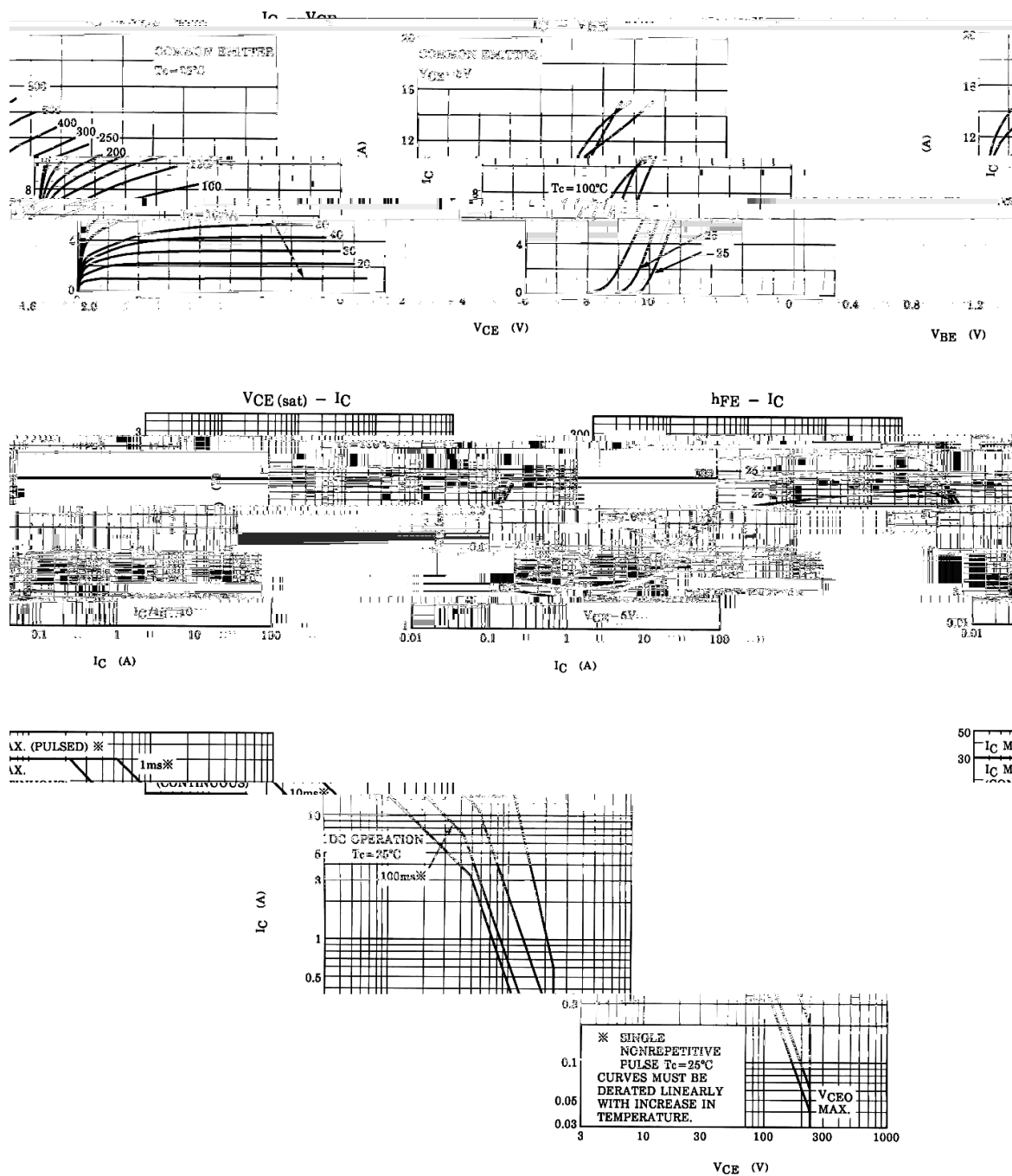
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	360	V
Collector to Emitter Voltage	V_{CEO}	360	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current - Continuous	I_C	15	A
Peak Collector Current	I_{CP}	30	A
Base Current	I_B	1.5	A
Collector Power Dissipation	P_C	150	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55~150	

/ Electrical Characteristics(Ta=25)

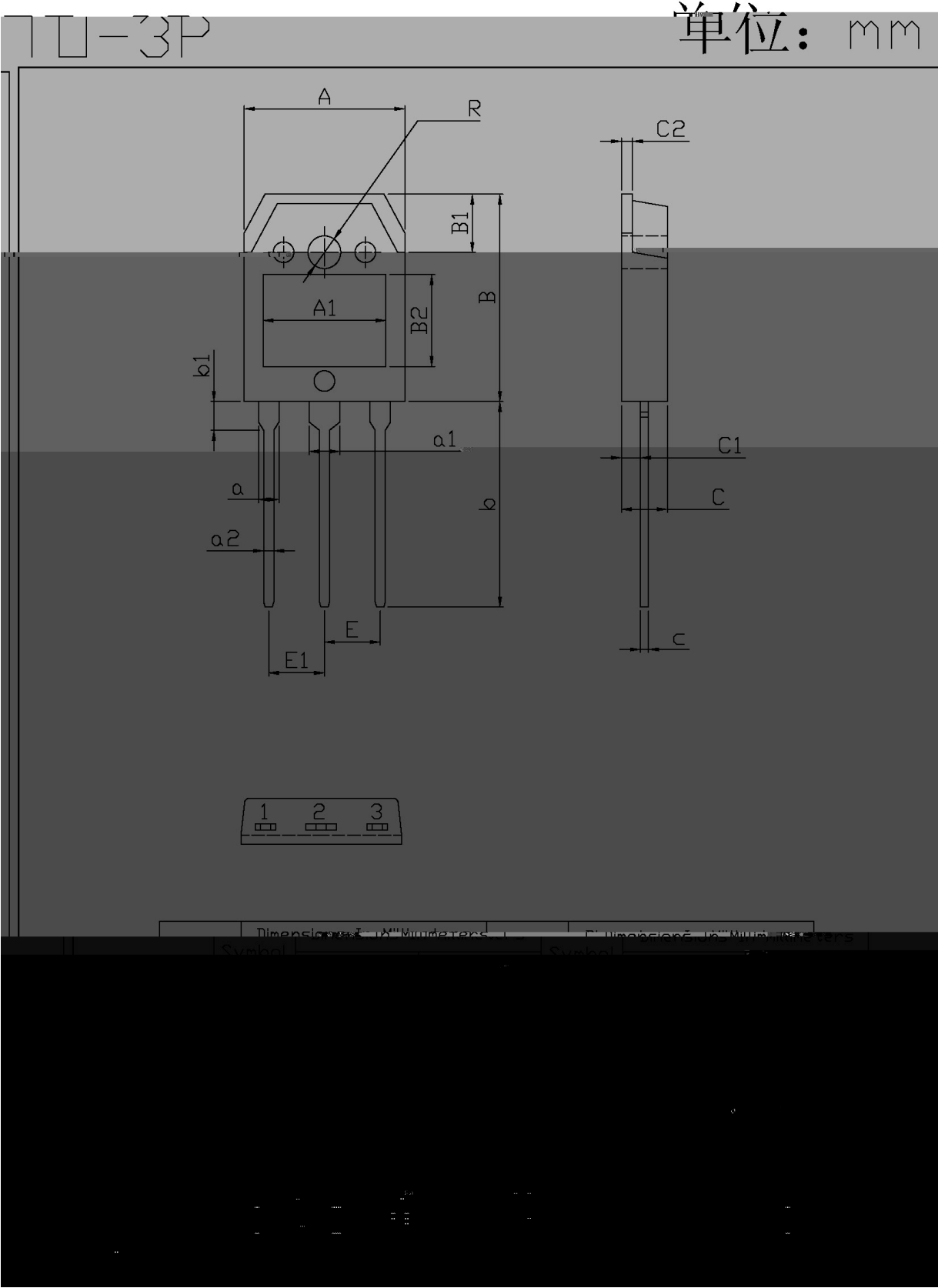
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=50mA$ $I_E=0$	360			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=230V$ $I_E=0$			5	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0V$ $I_C=0$			5	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5.0V$ $I_C=1.0A$	55		160	
	$h_{FE(2)}$	$V_{CE}=5.0V$ $I_C=7.0A$	35	80		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=8.0A$ $I_B=0.8A$		0.3	3.0	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=5.0V$ $I_C=7.0A$		1.0	1.5	V
Transition Frequency	f_T	$I_C=1.0A$ $V_{CE}=5.0V$		30		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V$ $I_E=0$ $f=1.0MHz$		200		pF

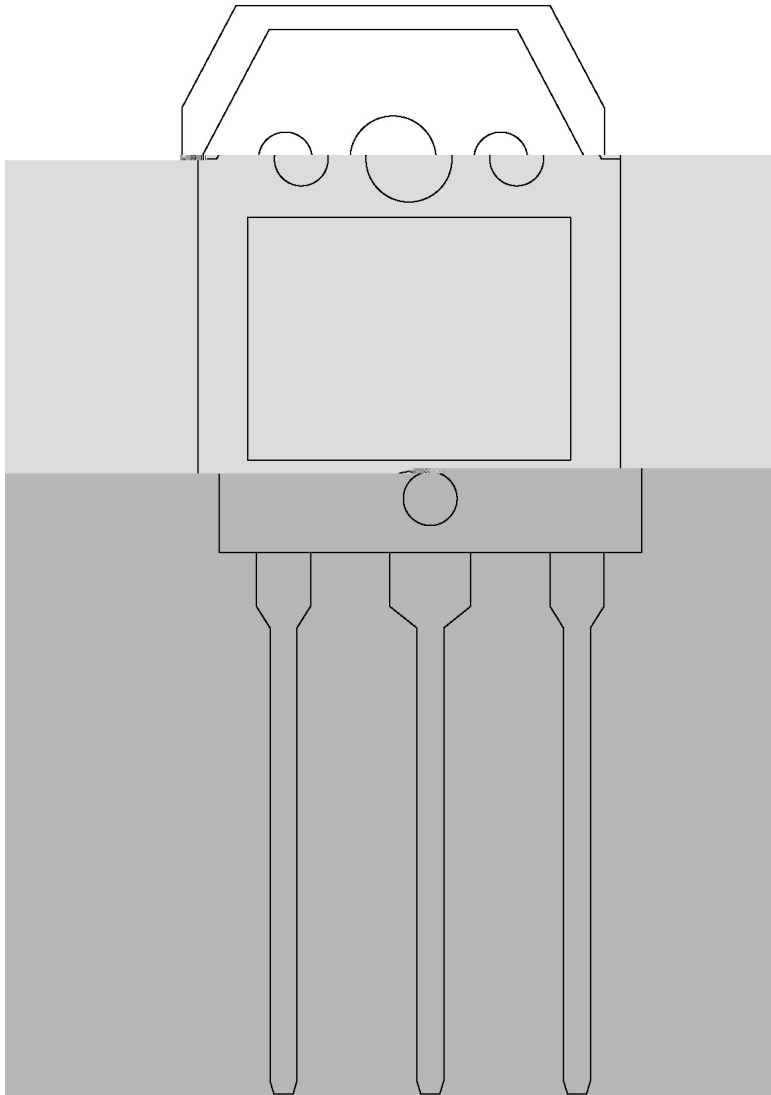


/ Electrical Characteristic Curve

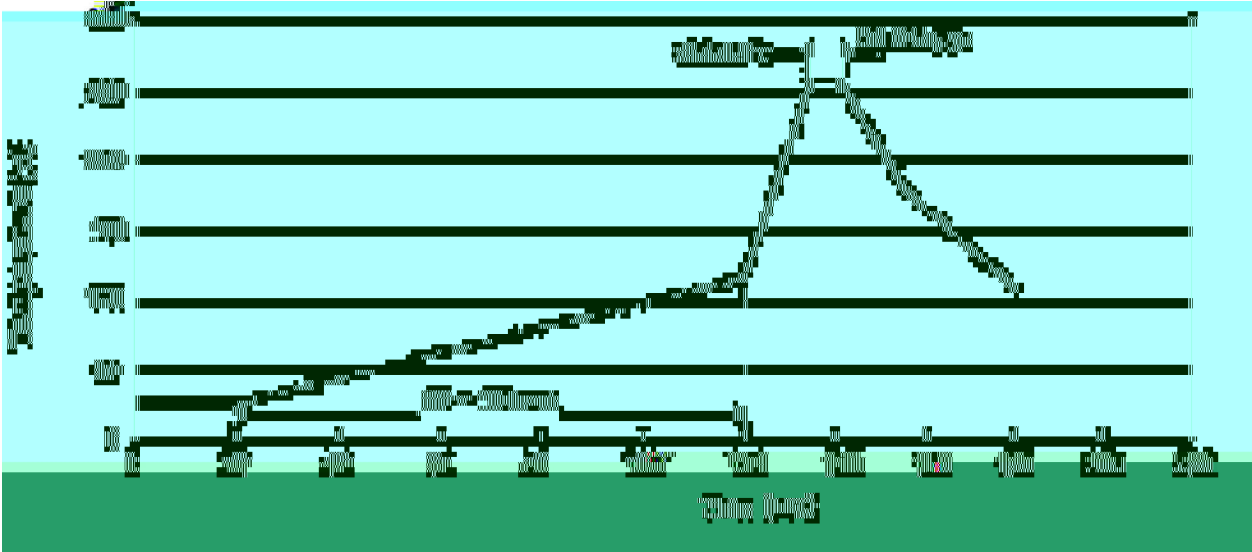


/ Package Dimensions





() / 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

5