

/ Descriptions

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

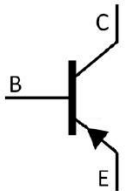
/ Features

100W NJW0281GD
Recommend for 100W high fidelity audio frequency amplifier output stage, Complementary to NJW0281GD.

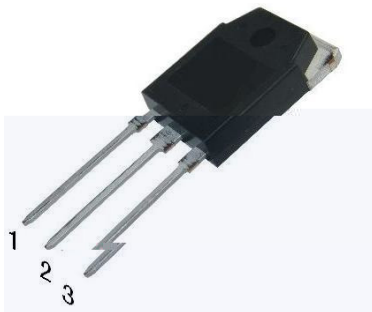
/ Applications

Power amplifier applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

See Marking Instructions.

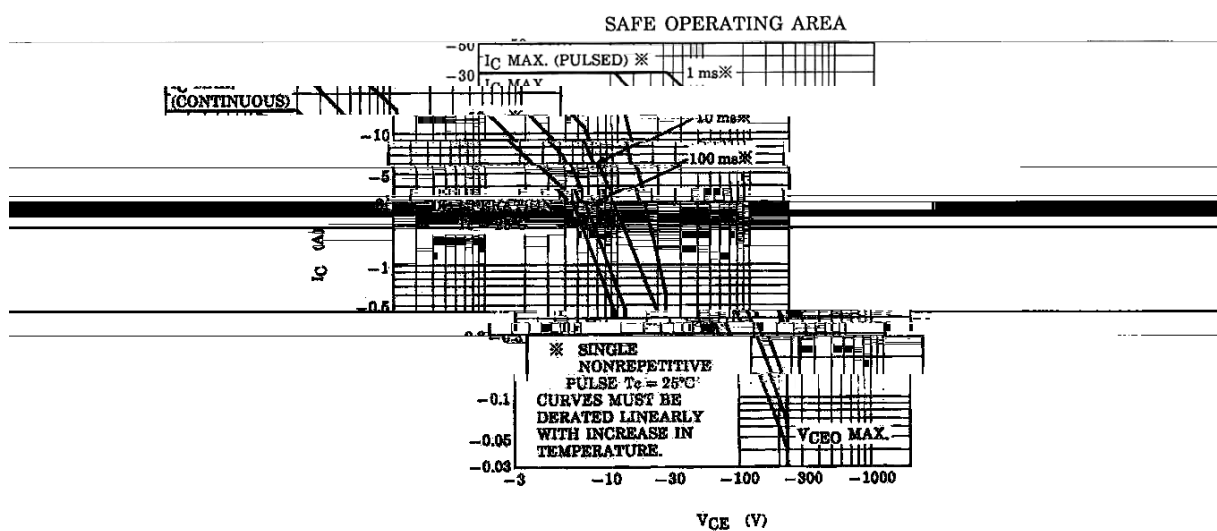
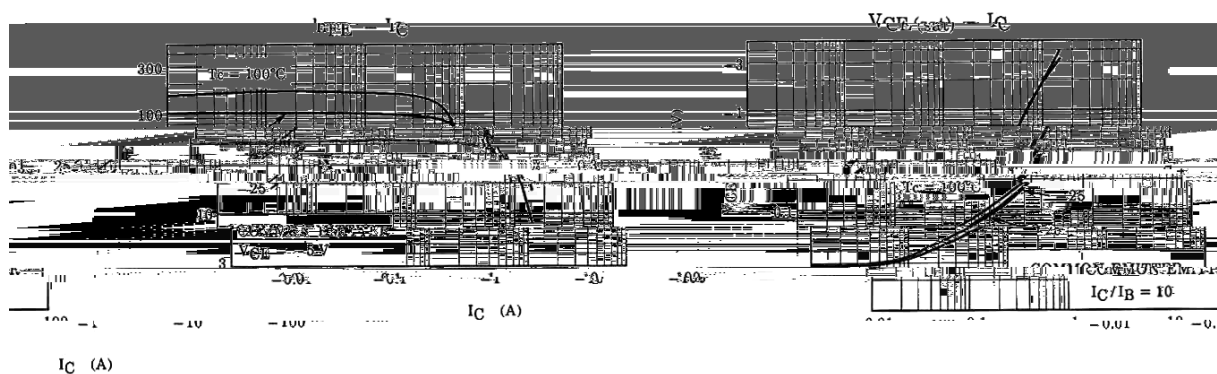
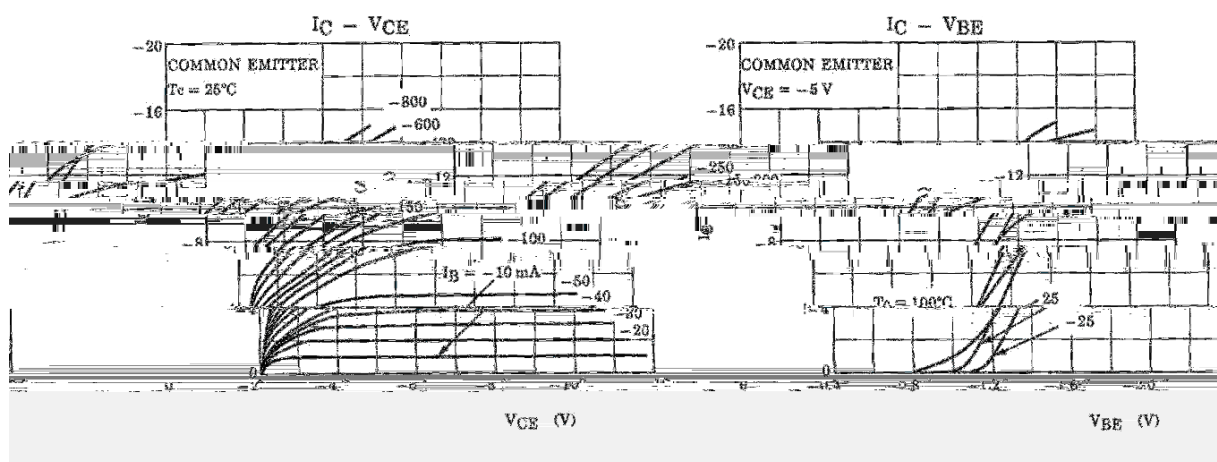
/ Absolute Maximum Ratings(Ta=25)

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	-30	A
Peak Collector Current	I_{CP}	-30	A
Base Current	I_B	-1.5	A
Collector Power Dissipation	$P_{C(TC=25)}$	150	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

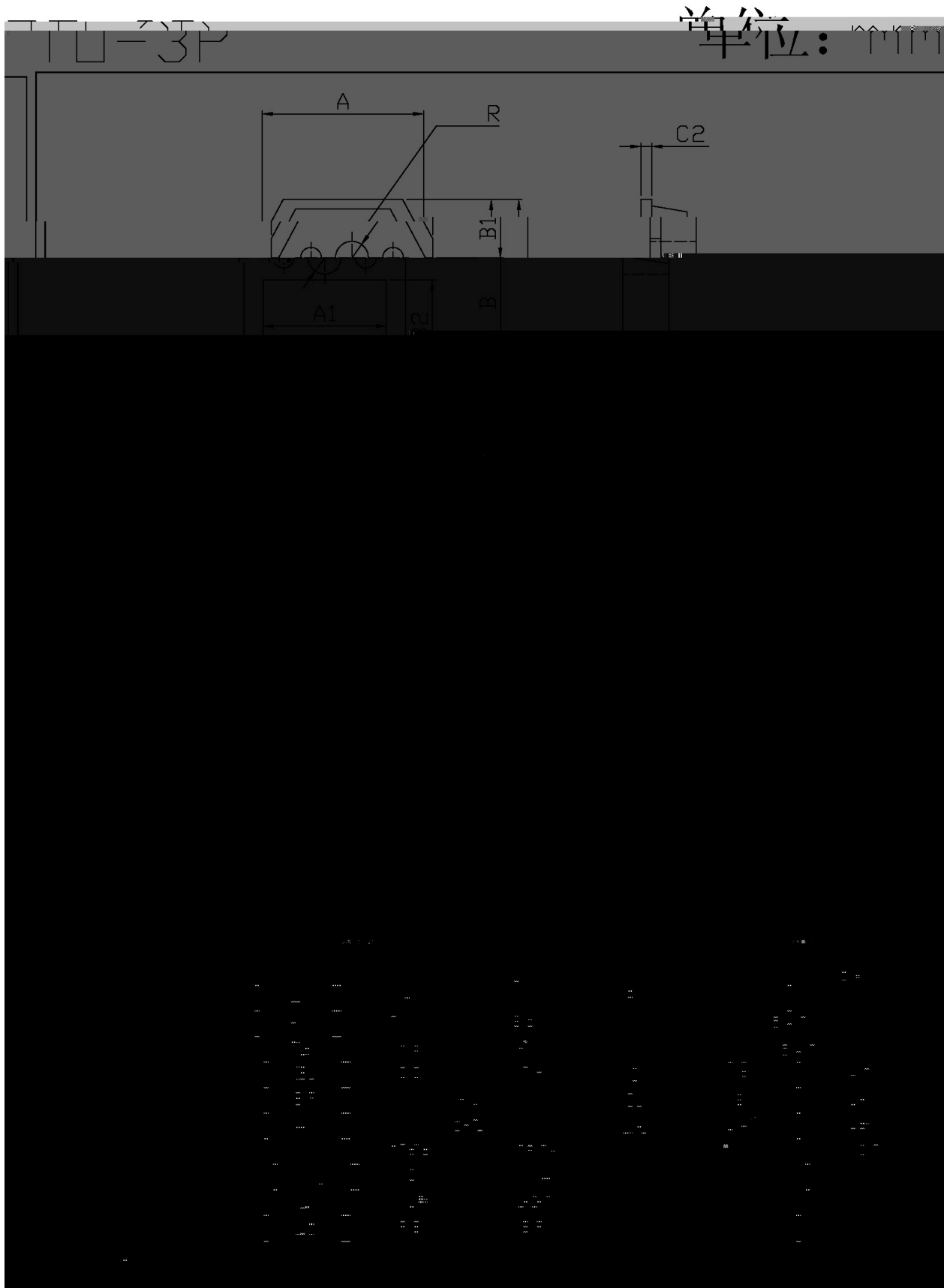
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=-50mA$ $I_B=0$	-360			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-230V$ $I_E=0$			-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	
	$h_{FE(2)}$	$V_{CE}=-5.0V$ $I_C=-7.0A$	35	80		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-8.0A$ $I_B=-0.8A$		-1.5	-3.0	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=-5.0V$ $I_C=-7.0A$		-1.2	-1.5	V
Transition Frequency	f_T	$I_C=-1.0A$ $V_{CE}=-5.0V$		30		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10V$ $I_E=0$ $f=1.0MHz$		360		pF

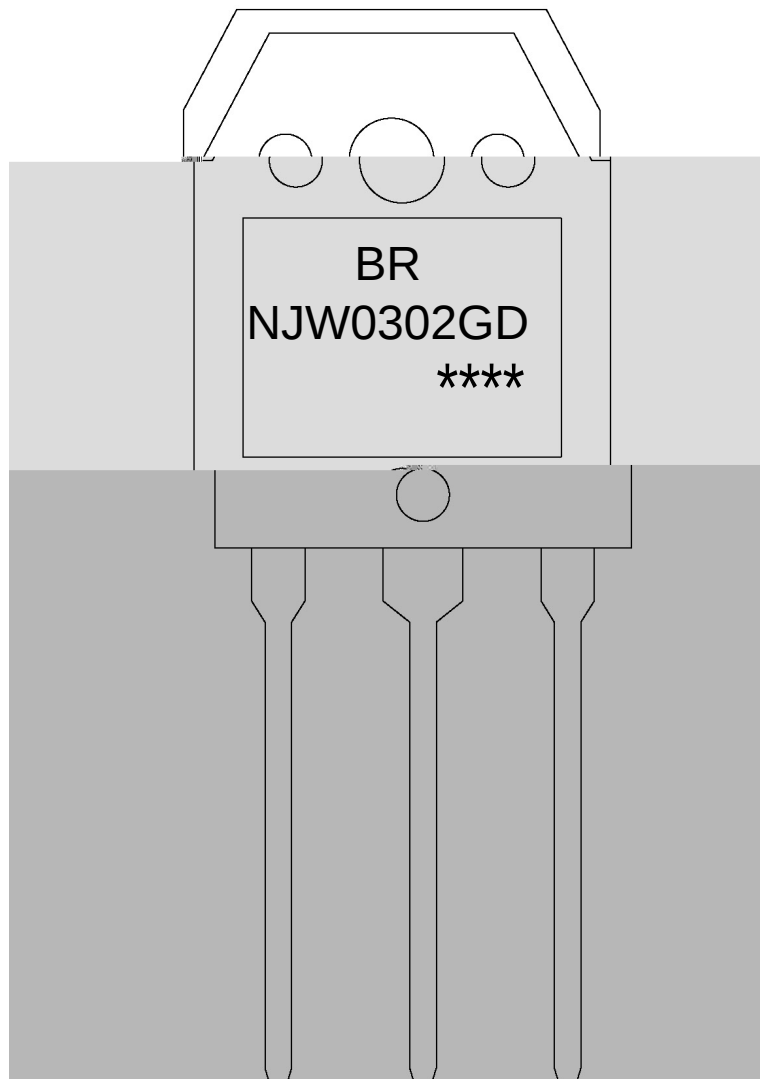
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

NJW0302GD

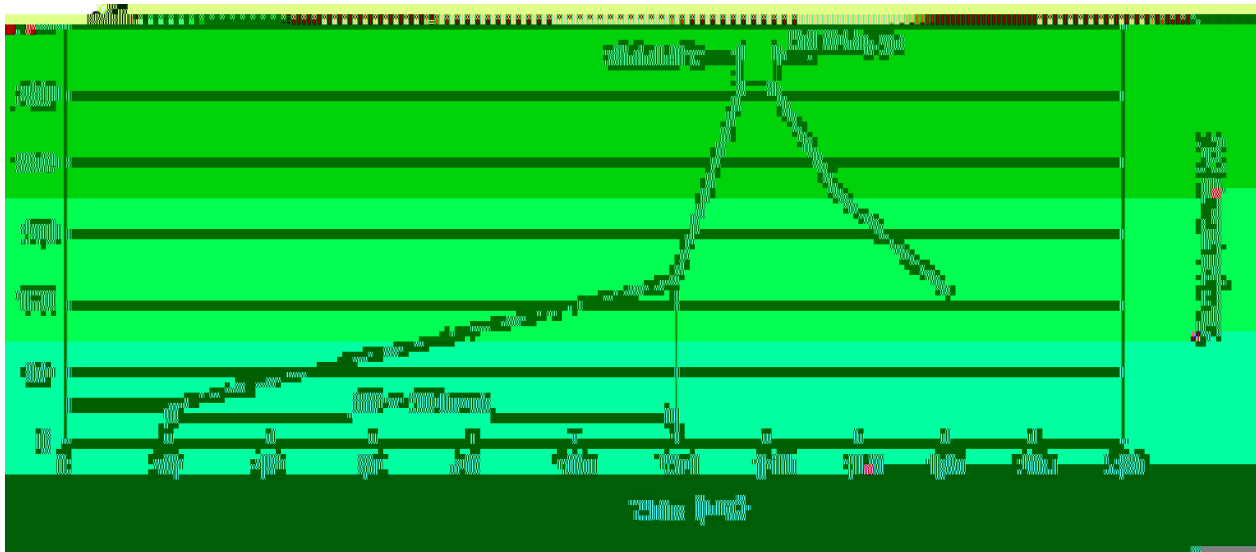
Note:

BR: Company Code.

NJW0302GD: Product Type.

****: Lot No. Code, code change with Lot No.

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



Note:

- | | | | | | |
|---|-------|-----|-----------|---|--------------------------------------|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255±5 | | 5±0.5sec; | 2.Peak Temp.:255±5 , Duration:5±0.5sec. | |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

270±5 10±1 sec. Temp.:270±5 Time:10±1 sec

/ Packaging SPEC.

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-3P	30	15	450	5	2250	497.5×46×8	555×164×50	575×290×180

/ Notices