

**/ Descriptions**

TO-220F          PNP          Silicon PNP transistor in a TO-220F Plastic Package.

**/ Features**

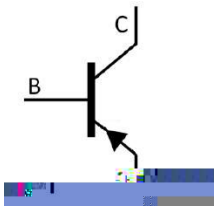
$h_{FE}$           -          TO-220

High forward current transfer ratio  $h_{FE}$  which has satisfactory linearity, low collector to emitter saturation voltage  $V_{CE(sat)}$  Full-pack package which can be installed to the heat sink with one screw.

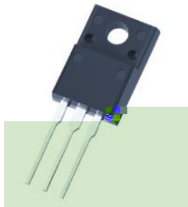
**/ Applications**

For low-frequency power amplification.

**/ Equivalent Circuit**



**/ Pinning**



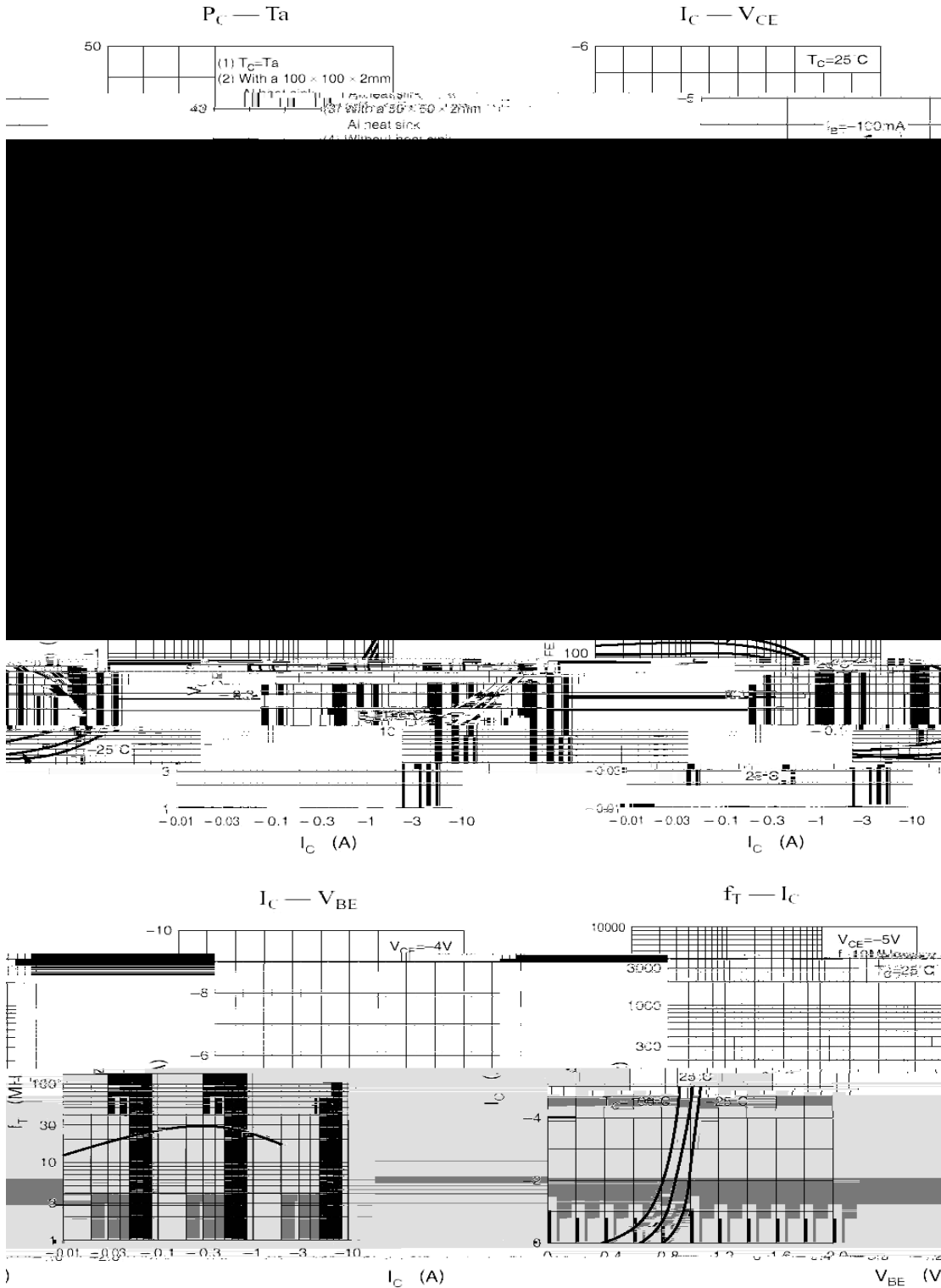
PIN1 Base          PIN 2 Collector          PIN 3 Emitter

**/  $h_{FE}$  Classifications & Marking**

$h_{FE}$ Classifications Symbol	Q	P
$h_{FE}$ Range	70 150	120 250

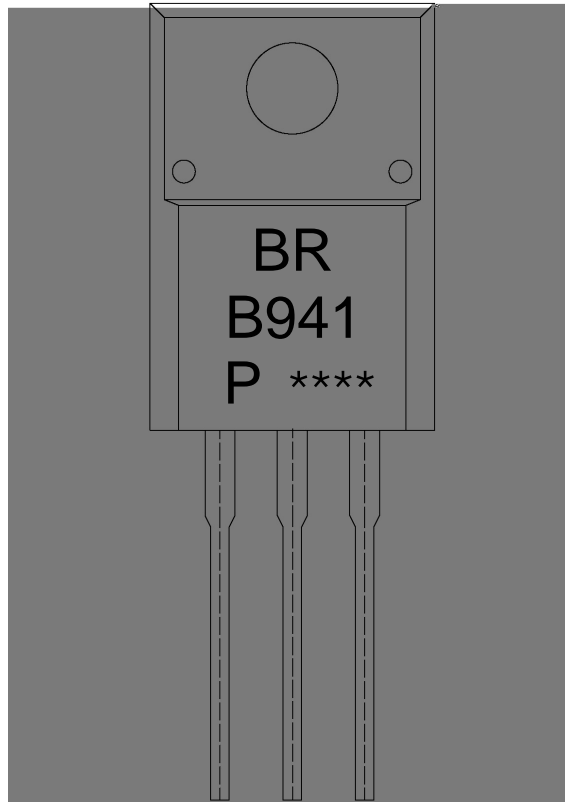
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	-60	V
Collector to Emitter Voltage	$V_{CEO}$	-60	V
Emitter to Base Voltage	$V_{EBO}$	-5.0	V
Collector Current - Continuous	$I_C$	-3.0	A
Collector Current – Continuous(Pulse)	$I_{CP}$	-5.0	A
Collector Power Dissipation	$P_C$	2.0	W
Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55 150	

**/ Electrical Characteristic Curve**





/ Marking Instructions



BR

B941

Q:  $h_{FE}$

\*\*\*\*

Note:

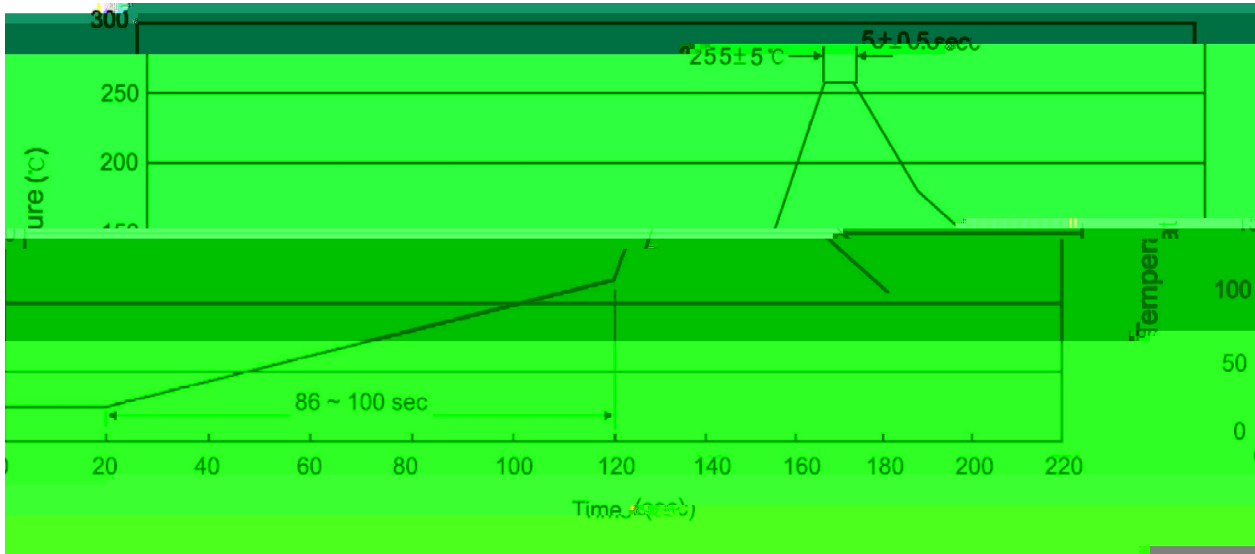
BR: Company Code.

B941: Product Type.

Q:  $h_{FE}$  Classifications Symbol

\*\*\*\*: 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±0.5 | sec;     | 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.

/ BULK

Package Type	Units					Dimension (unit mm <sup>3</sup> )		
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type	Units					Dimension (unit mm <sup>3</sup> )		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices