

BR2N6488

Rev. C Oct.-2018

/ Descriptions

TO-220

NPN

Silicon NPN transistor in a TO-220 Plastic Package.

/ Features

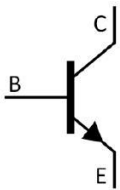
BR2N6491

Complement to BR2N6491.

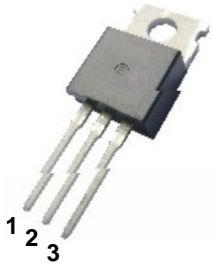
/ Applications

Use in general-purpose amplifier and switching applications.

/ Equivalent Circuit



/ Pinning



PIN1 Base

PIN 2 Collector

PIN 3 Emitter

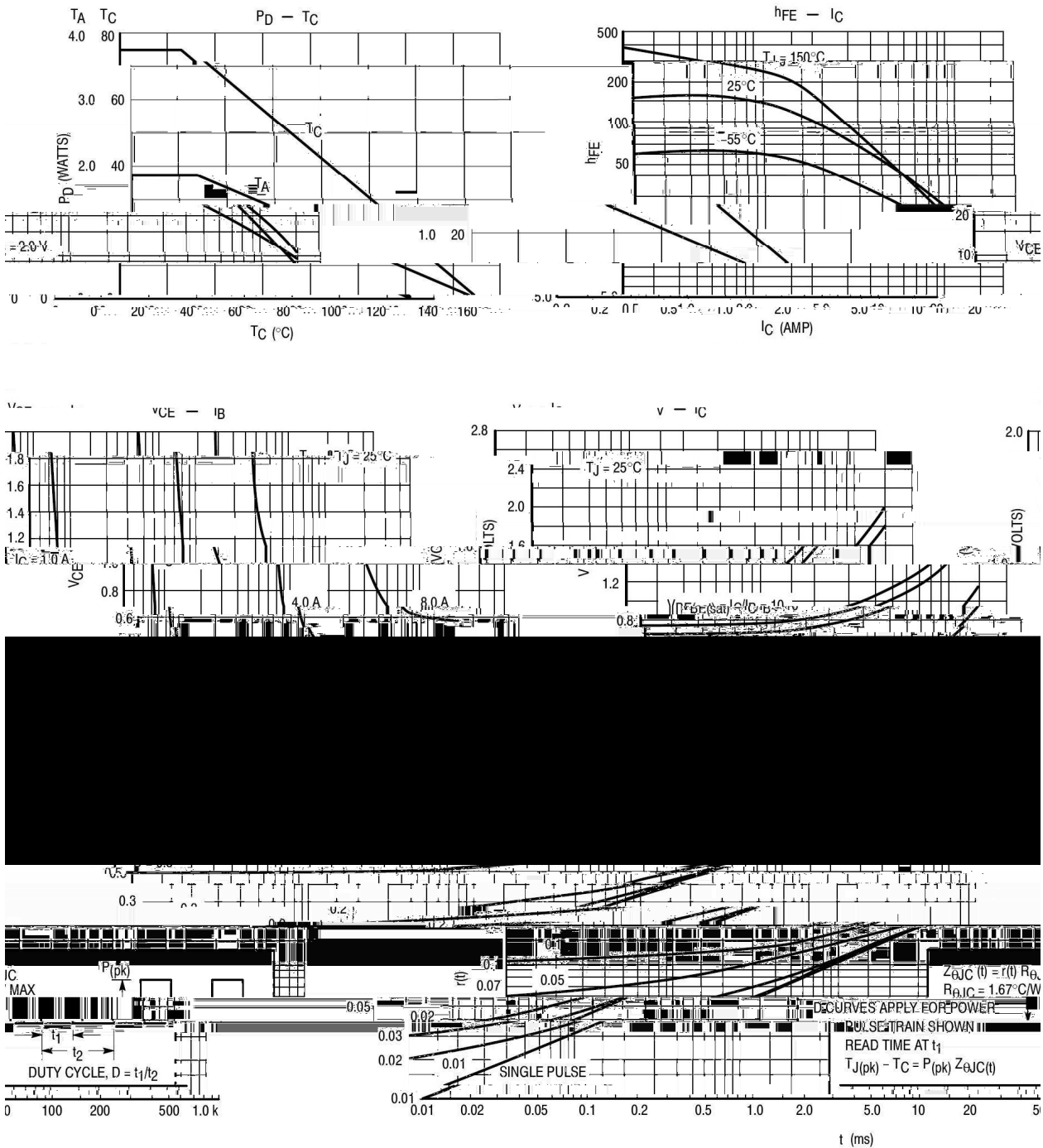
/ h_{FE} Classifications & Marking

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	90	V
Collector to Emitter Voltage	V_{CEO}	80	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	15	A
Base Current	I_B	5.0	A
Total Power Dissipation	$P_D(T_C=25^\circ\text{C})$	75	W
	$P_D(T_A=25^\circ\text{C})$	1.8	W
Operating and Storage Junction Temperature Range	$T_j T_{stg}$	-65 +150	
Thermal Resistance Junction to Case	R_{JC}	1.67	/W
Thermal Resistance Junction to Ambient	R_{JA}	70	/W

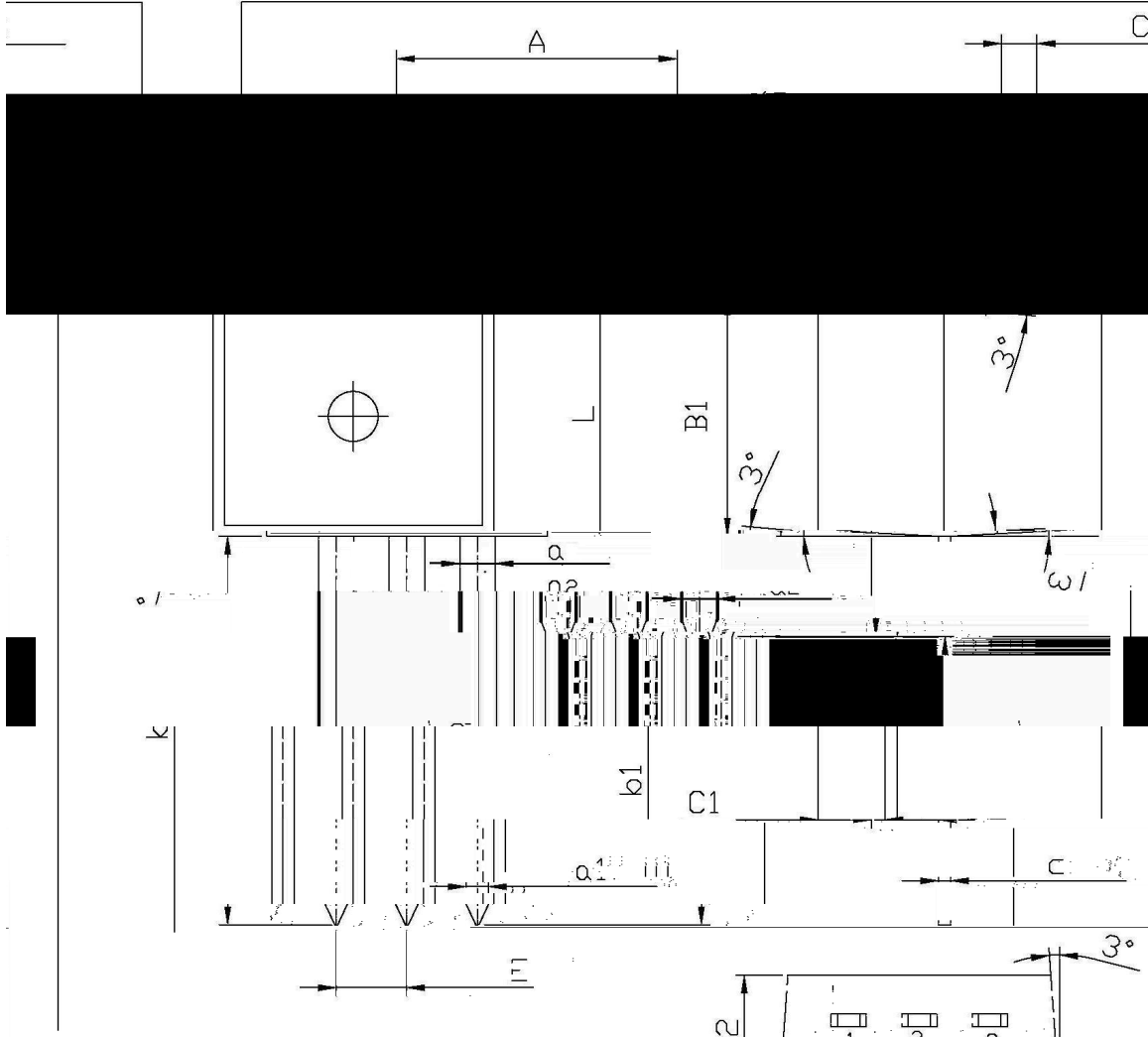
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Emitter Sustaining Voltage	$V_{CEO(sus)}$	$I_C=200\text{mA}$ $I_B=0$	80			V
Collector Emitter Sustaining Voltage	V_{CEX}	$I_C=200\text{mA}$ $V_{BE}=1.5\text{V}$	90			V
Collector Cut-Off Current	I_{CEX}	$V_{CB}=85\text{V}$ $V_{BE(off)}=1.5\text{V}$			500	μA
		$V_{CB}=80\text{V}$ $V_{BE(off)}=1.5\text{V}$ $T_C=150$			5.0	μA
Collector Cut-Off Current	I_{CEO}	$V_{CE}=40\text{V}$ $I_B=0$			1.0	mA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=5.0\text{V}$ $I_C=0$			1.0	mA

/ Electrical Characteristic Curve



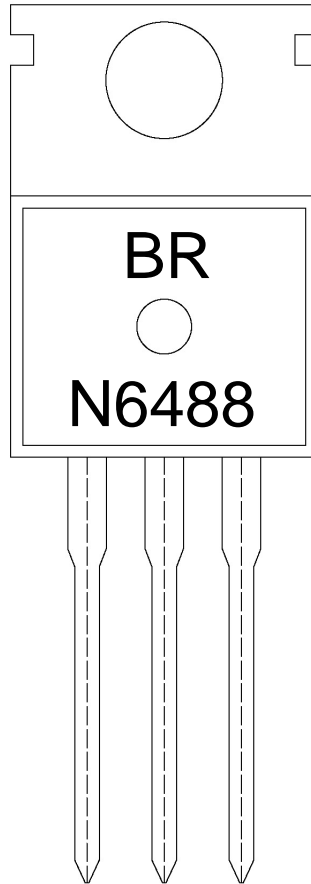
/ Package Dimensions

mm TO-220 单位:



Symbol	Dimensions in millimeters		Symbol	Dimensions in millimeters	
	Min	Max		Min	Max
A	9.8	10.2	C	1.2	1.4
B	3.56	3.64	B1	6.3	6.7
B1	9.0	9.4	L	10.0	10.5
C1	2.2	2.6	a	0.4	0.6
L	10.0	10.5	b1	0.7	0.9
a	0.4	0.6	a1	0.1	0.2
C2	4.3	4.7	E	2.34	2.5
k	1.45	1.55	E1	0.2	0.25

/ Marking Instructions



BR

N6488

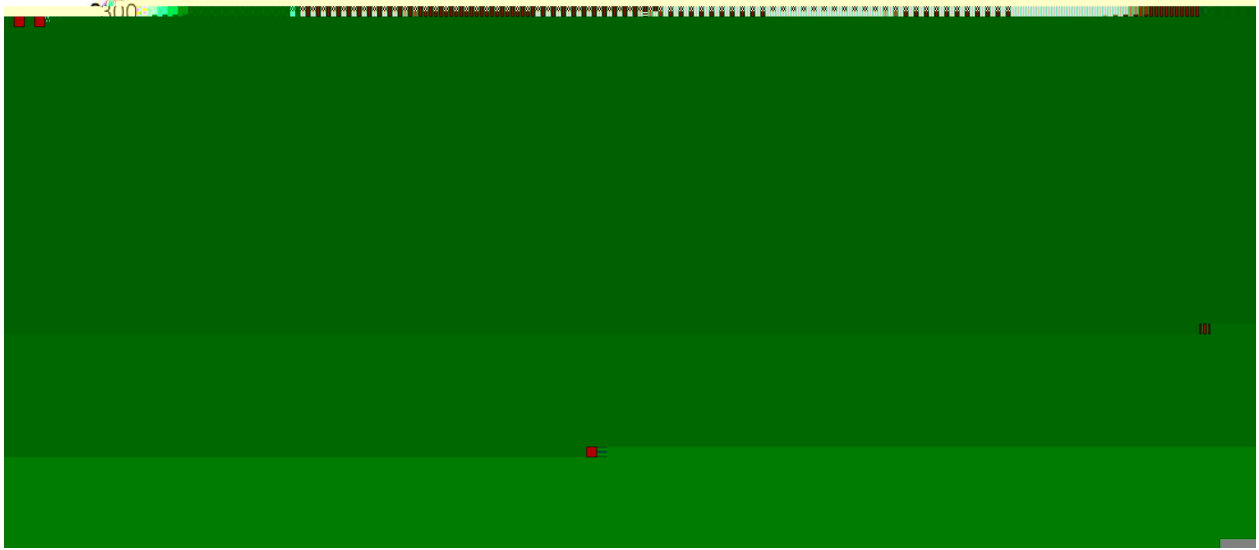
Note:

BR: Company Code

N6488: Product Type.

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

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



- | | | | | | | |
|---|-------|-----|-----------|--------|---|--------------------------------------|
| 1 | 25 | 150 | 60 | 90sec; | Note: | 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.

/ BULK

Package Type	Units 包装数量			Dimension 包装尺寸 (unit: mm ³)
封装形式	只袋	袋盒	只盒	