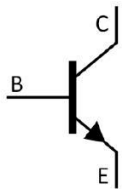


Silicon NPN transistor in a TO-220 Plastic Package.

High speed switching, high SOA.

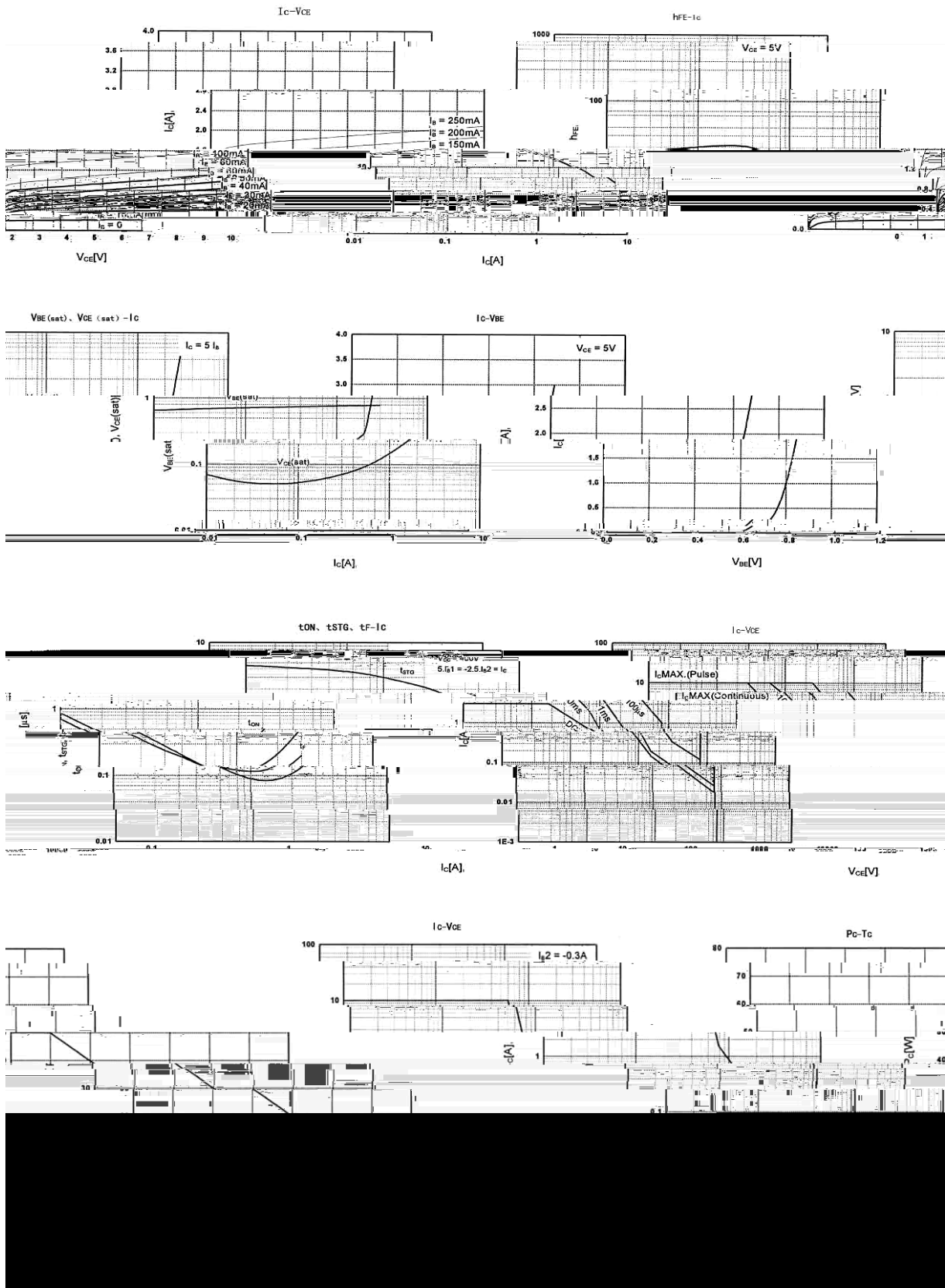
High voltage switching and amplifier applications.



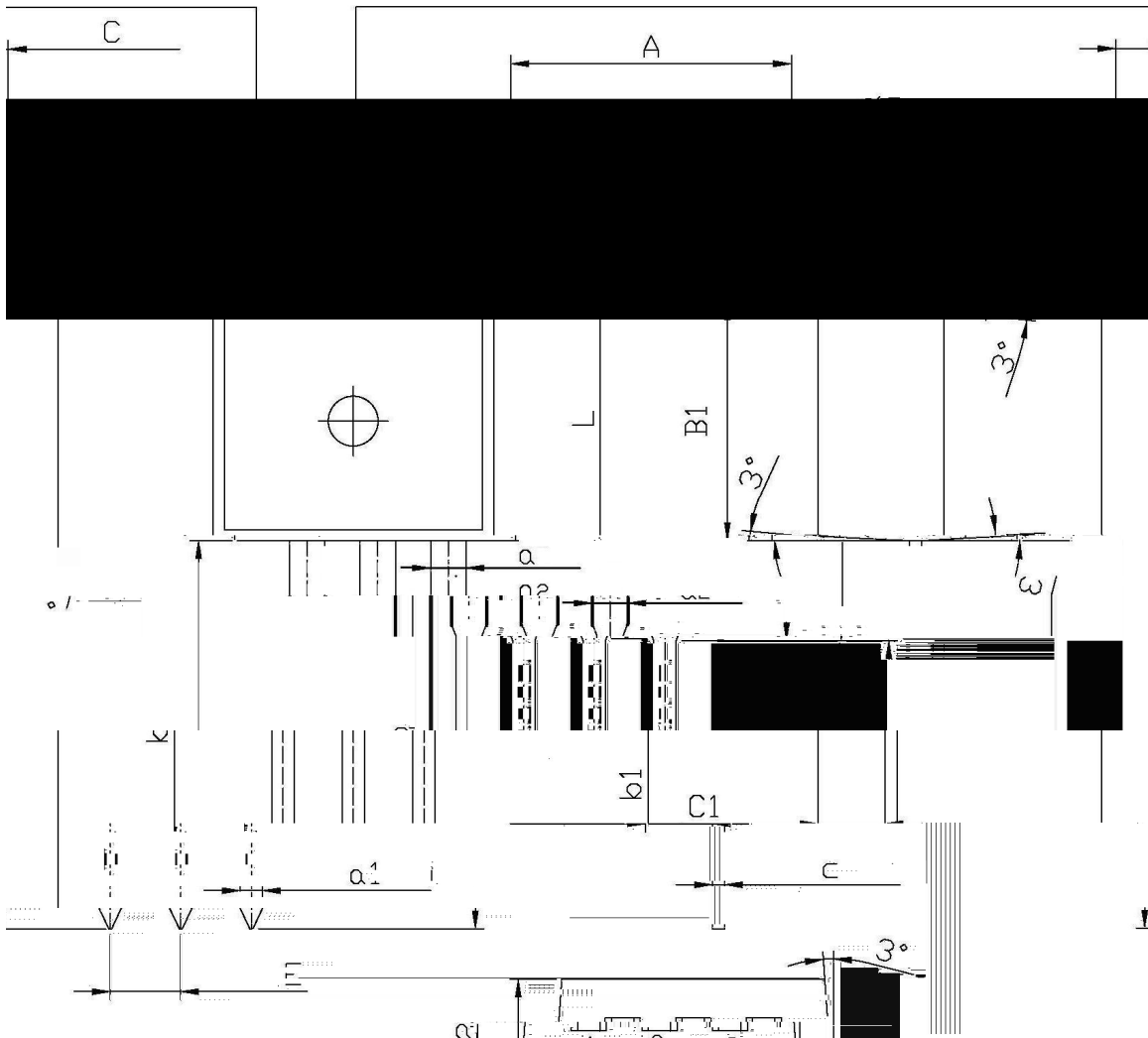
PIN1 Base    PIN 2 Collector    PIN 3 Emitter

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	1100	V
Collector to Emitter Voltage	$V_{CEO}$	800	V
Emitter to Base Voltage	$V_{EBO}$	7.0	V
Collector Current - Continuous	$I_C$	3.0	A
Collector Current – Continuous(Pulse)	$I_{CP}$	10	A
Base Current - Continuous	$I_B$	1.5	A
Collector Power Dissipation	$P_C(T_C=25^\circ C)$	50	W
Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55 150	

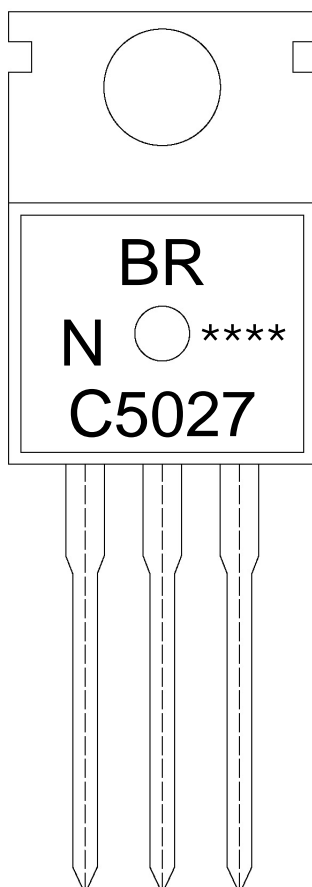
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	$V_{CBO}$	$I_C=1.0mA$ $I_E=0$	1100			V
Collector to Emitter Breakdown Voltage	$V_{CEO}$	$I_C=5.0mA$ $I_B=0$	800			V
Emitter to Base Breakdown Voltage	$V_{EBO}$	$I_E=1.0mA$ $I_C=0$	7.0			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=800V$ $I_E=0$			10	A
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=5.0V$ $I_C=0$			10	A
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5.0V$ $I_C=0.2A$	10		40	
	$h_{FE(2)}$	$V_{CE}=5.0V$ $I_C=1.0A$	8.0			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1.5A$ $I_B=0.3A$			2.0	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=1.5A$ $I_B=0.3A$			1.5	V
Transition Frequency	$f_T$	$V_{CE}=10V$ $I_C=0.2A$		15		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10V$ $I_E=0$ $f=1.0MHz$		60		pF
Turn-On Time	$T_{on}$	$V_{CC}=400V$ $R_L=200$ $I_C=5I_{B1}=-2.5I_{B2}=2A$			0.5	s
Storage Time	$T_{stg}$				3.0	
Fall Time	$T_{off}$				0.3	



$\bar{L}$ : 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	B	6.3	6.7
B1	9.0	9.4	B1	15.7	16.1
C1	0.4	0.6	b1	1.22	1.32
a	0.2	0.25	a	1.25	1.4



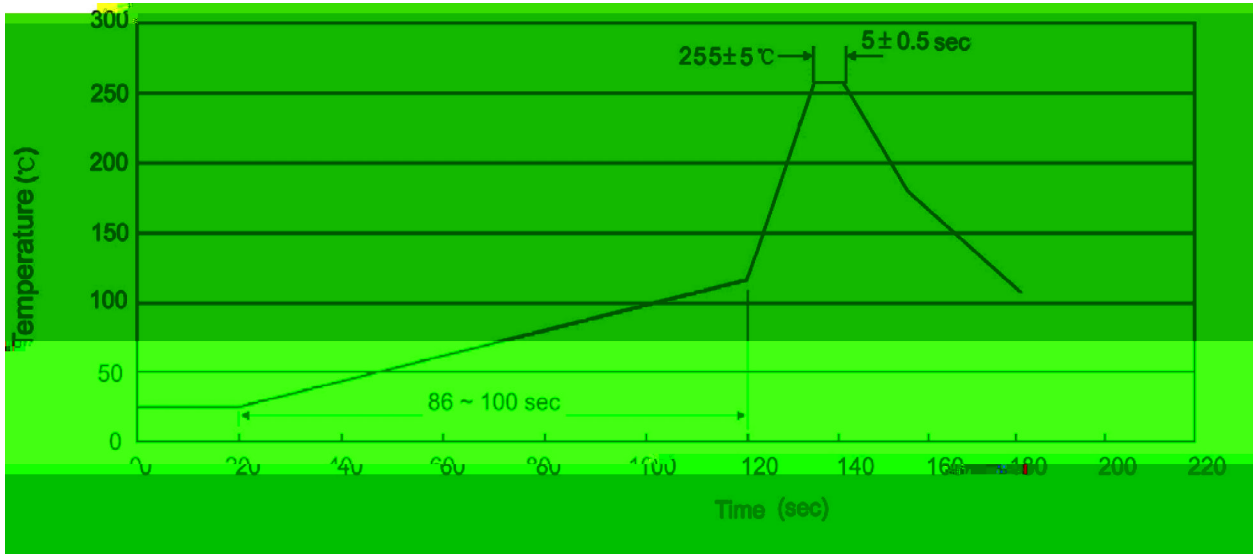
Note:

BR: Company Code

C5027: Product Type.

N:  $h_{FE}$  Classifications Symbol

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


**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.            |

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

## / BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

## / TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	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-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180