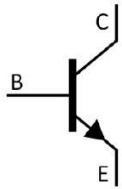


TO-220 NPN Silicon NPN transistor in a TO-220 Plastic Package.

High speed switching, high SOA.

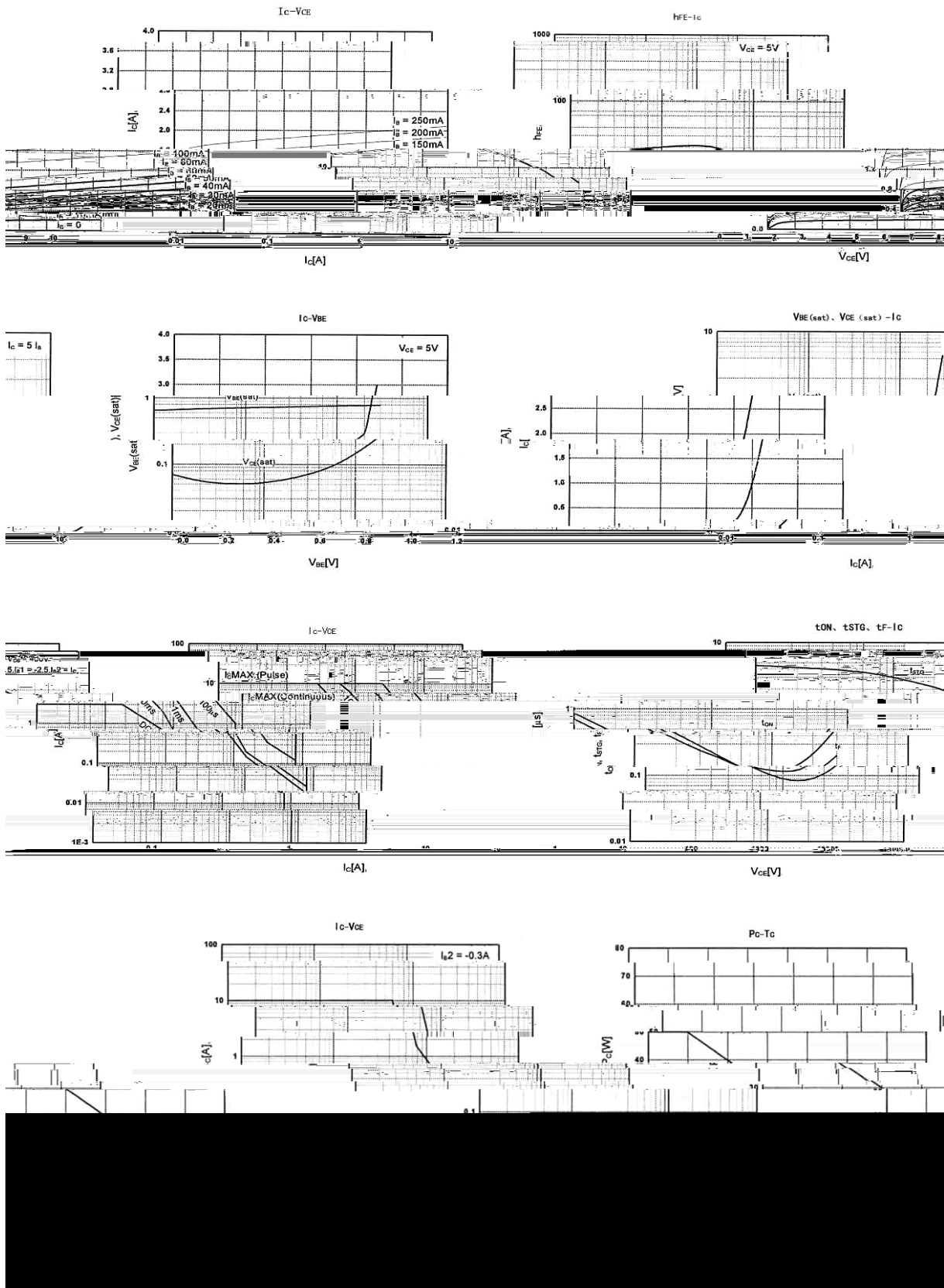
High voltage switching and amplifier applications.



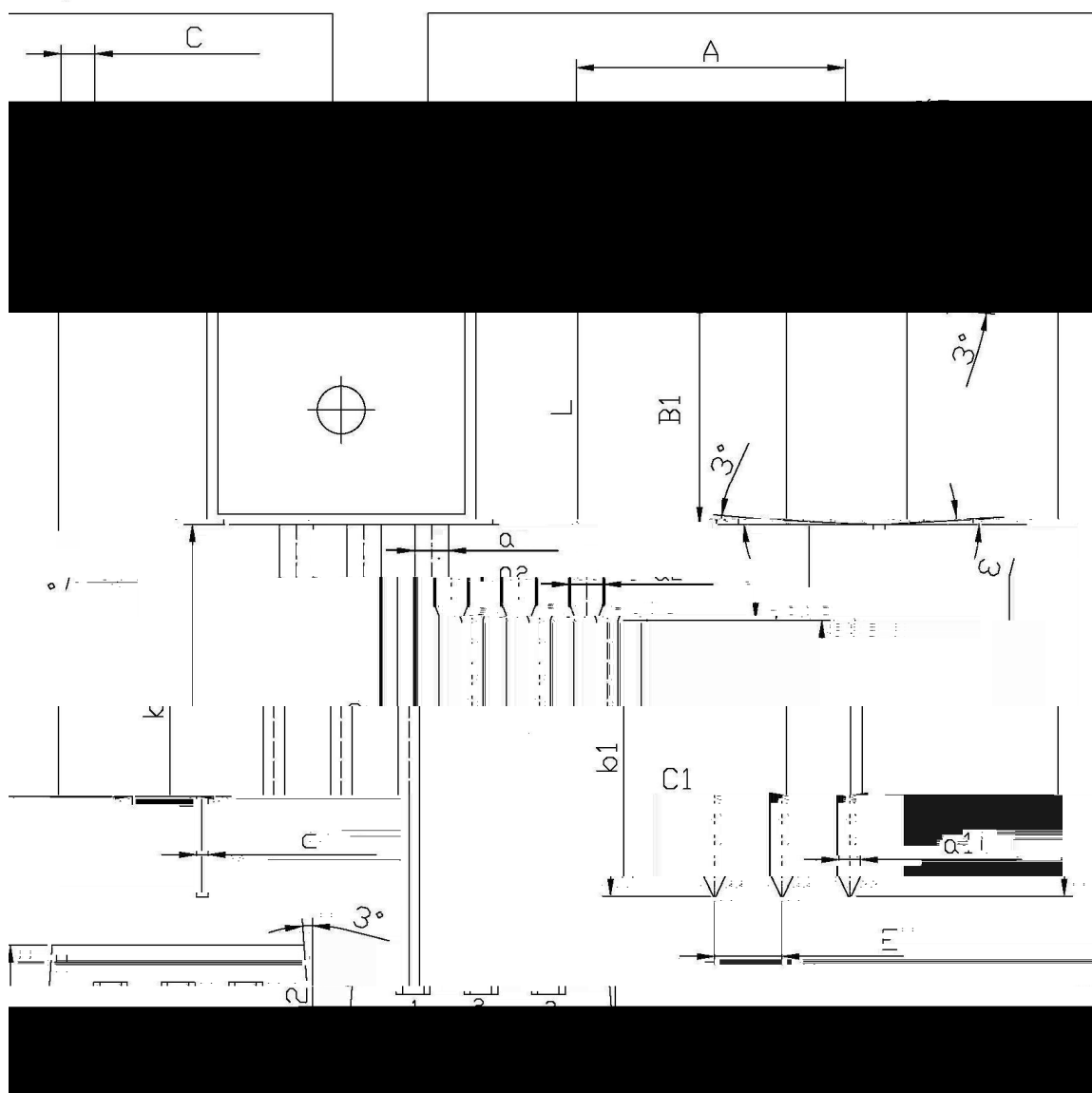
PIN1 Base PIN 2 Collector PIN 3 Emitter

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	

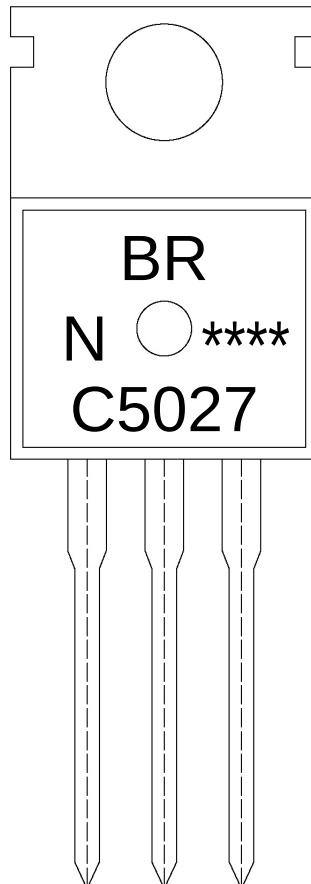
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=1.0mA$ $I_E=0$	1100			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=5.0mA$ $I_B=0$	800			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=1.0mA$ $I_C=0$	7.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=800V$ $I_E=0$			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}	$V_{CC}=400V$ $R_L=200\Omega$ $I_C=5I_{B1}=-2.5I_{B2}=2A$			0.5	s
Storage Time	T_{stg}				3.0	
Fall Time	T_{off}				0.3	



单位: mm TO-220 E



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	C1	15.7	16.1
h1	0.96	1.04	h2	0.7	0.9
h2	1.22	1.32	h3	0.4	0.6
h3	1.57	1.7	h4	1.57	1.7
h4	1.25	1.45	h5	1.25	1.45



BR

C5027

N: h_{FE}

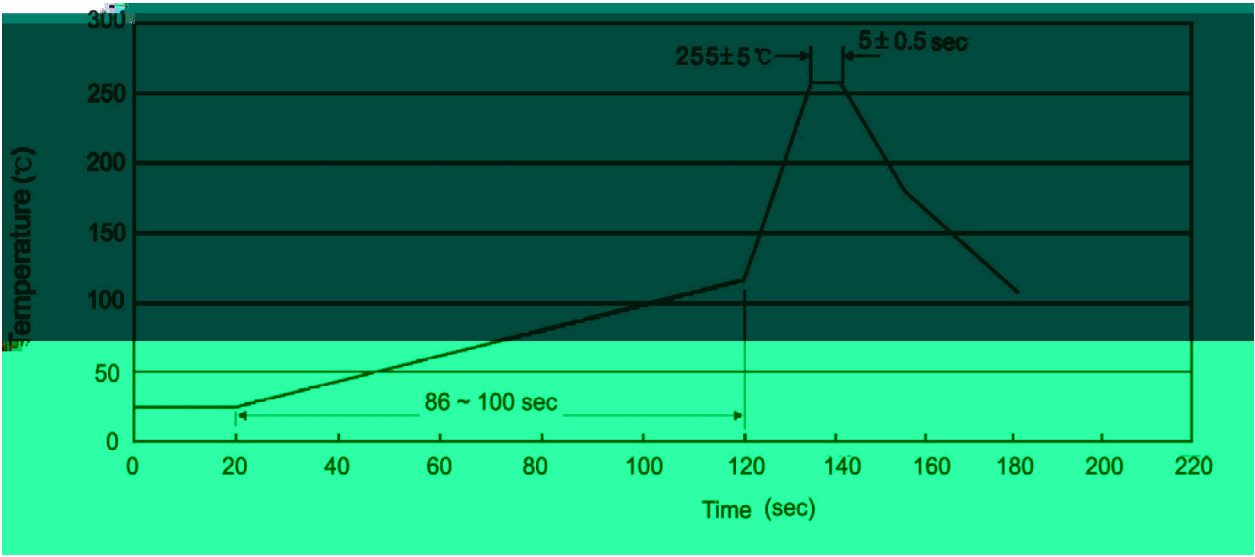
Note:

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;
- 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.

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 ³)		
	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 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-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180