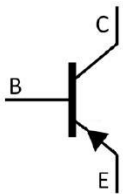


Silicon PNP transistor in a TO-92LM Plastic Package.

Low collector saturation, high speed switching time, complementary to KTC3209.

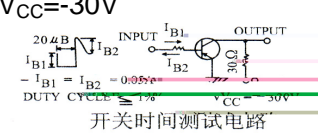
Power amplifier and switching applications.



PIN1 Base      PIN 2 Collector      PIN 3 Emitter

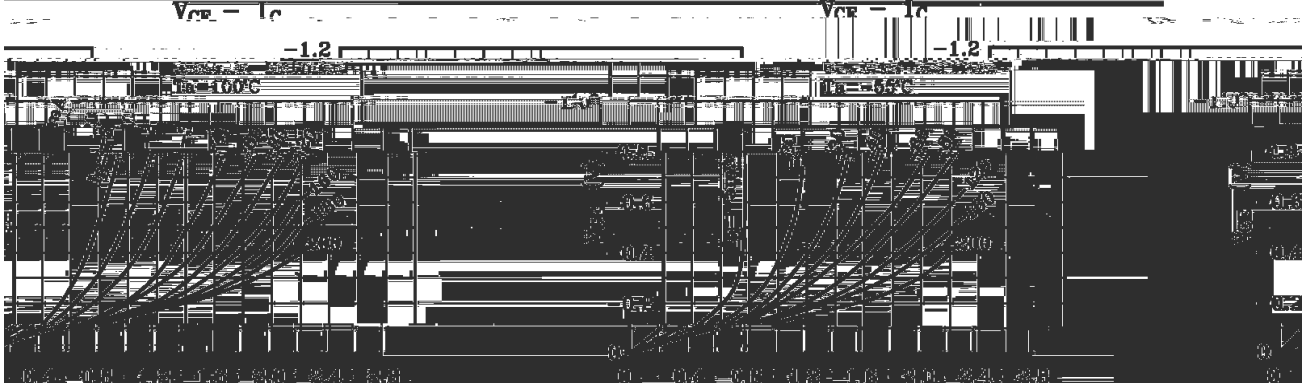
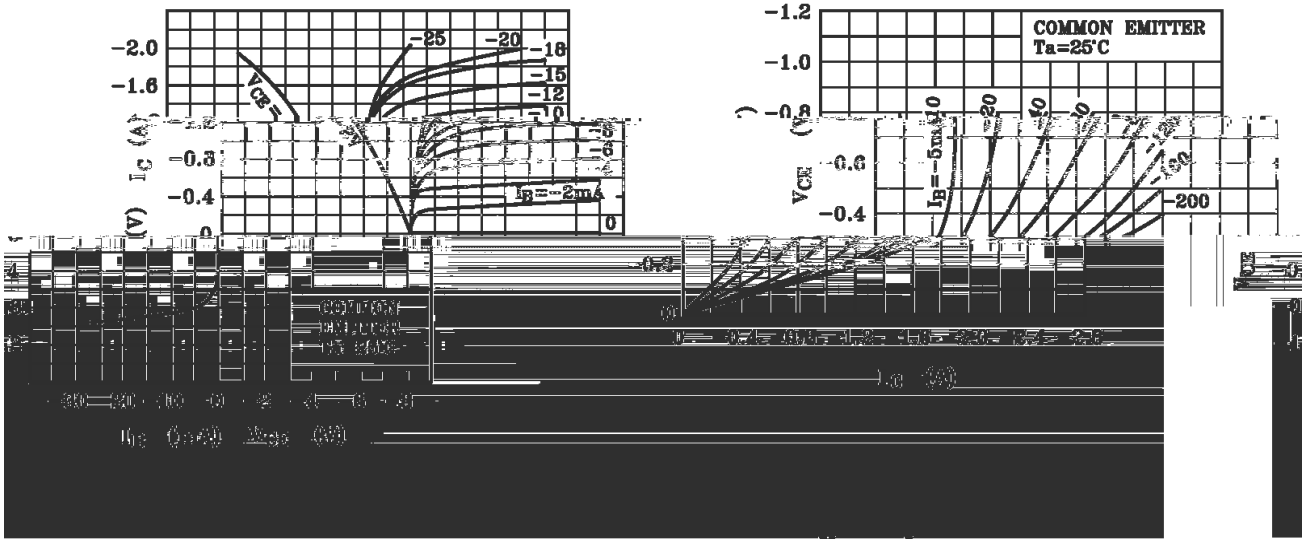
$h_{FE}$ Classifications Symbol	O	Y
$h_{FE}$ Range	70~140	120~240

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	-50	V
Collector to Emitter Voltage	$V_{CEO}$	-50	V
Emitter to Base Voltage	$V_{EBO}$	-5.0	V
Collector Current - Continuous	$I_C$	-2.0	A
Collector Power Dissipation	$P_C$	1.0	W
Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Emitter Breakdown Voltage	$V_{CEO}$	$I_C = -10mA$ $I_B = 0$	-50			V
Emitter to Base Breakdown Voltage	$V_{EBO}$	$I_E = -1.0mA$ $I_C = 0$	-5.0			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB} = -50V$ $I_E = 0$			-0.1	$\mu A$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB} = -5.0V$ $I_C = 0$			-0.1	$\mu A$
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -2.0V$ $I_C = -0.5A$	70		240	
	$h_{FE(2)}$	$V_{CE} = -2.0V$ $I_B = -1.5A$	40			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -1.0A$ $I_B = -0.05A$			-0.5	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -1.0A$ $I_B = -0.05A$			-1.2	V
Transition Frequency	$f_T$	$V_{CE} = -2.0V$ $I_C = -0.5A$		100		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -10V$ $I_E = 0$ $f = 1.0MHz$		40		pF
Turn-Off Time	$t_f$	 <p> <math>-I_{B1} = I_{B2} = 0.05A</math>            DUTY CYCLE <math>\leq 1\%</math> <math>V_{CC} = -30V</math>            开关时间测试电路         </p>		0.1	$\mu s$	
Turn-On Time	$t_{on}$				0.1	$\mu s$
Storage Time	$t_{stg}$				1.0	$\mu s$

**STATIC CHARACTERISTICS**

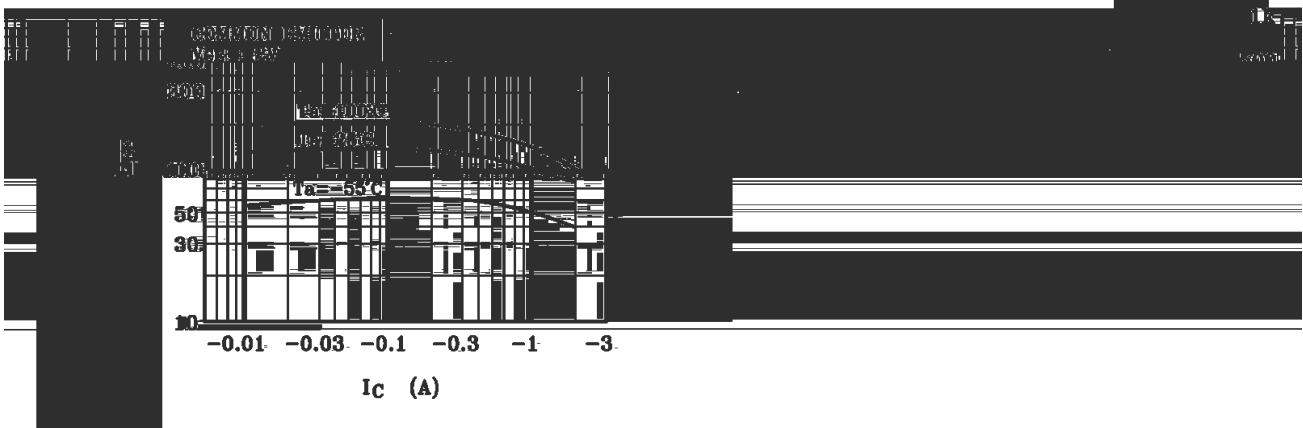
**$V_{CE} - I_C$**



$I_C$  (A)

$I_C$  (A)

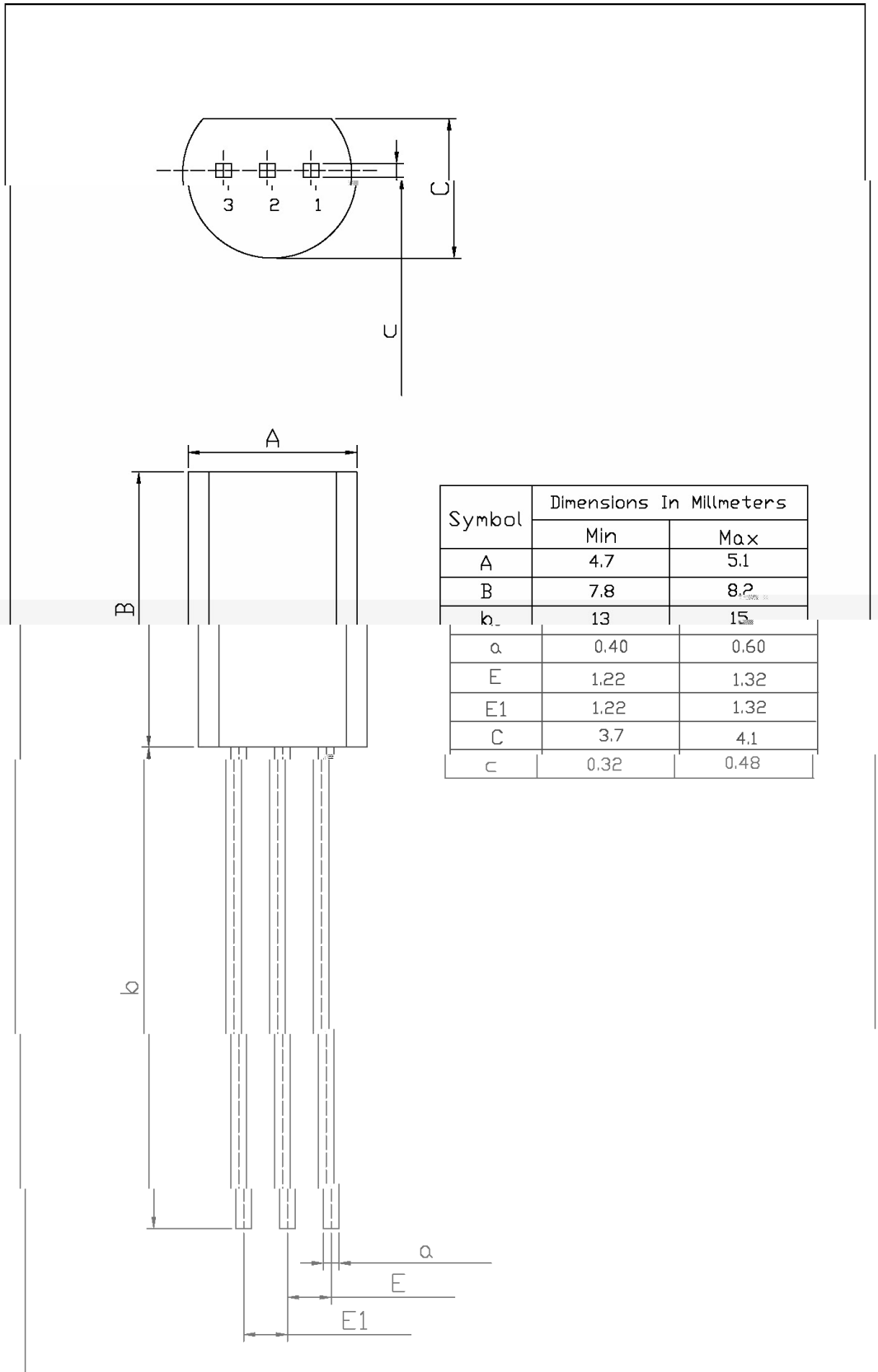
**$h_{FE} - I_C$**



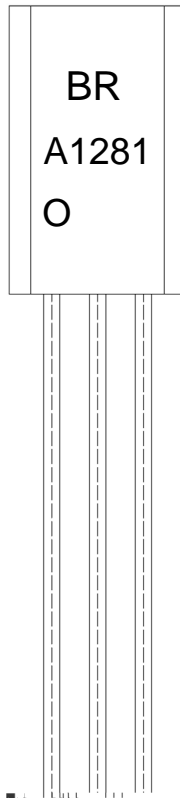
$I_C$  (A)

# TO-92LM

Unit: mm



Symbol	Dimensions In Millimeters	
	Min	Max
A	4.7	5.1
B	7.8	8.2
b	13	15
a	0.40	0.60
E	1.22	1.32
E1	1.22	1.32
C	3.7	4.1
c	0.32	0.48



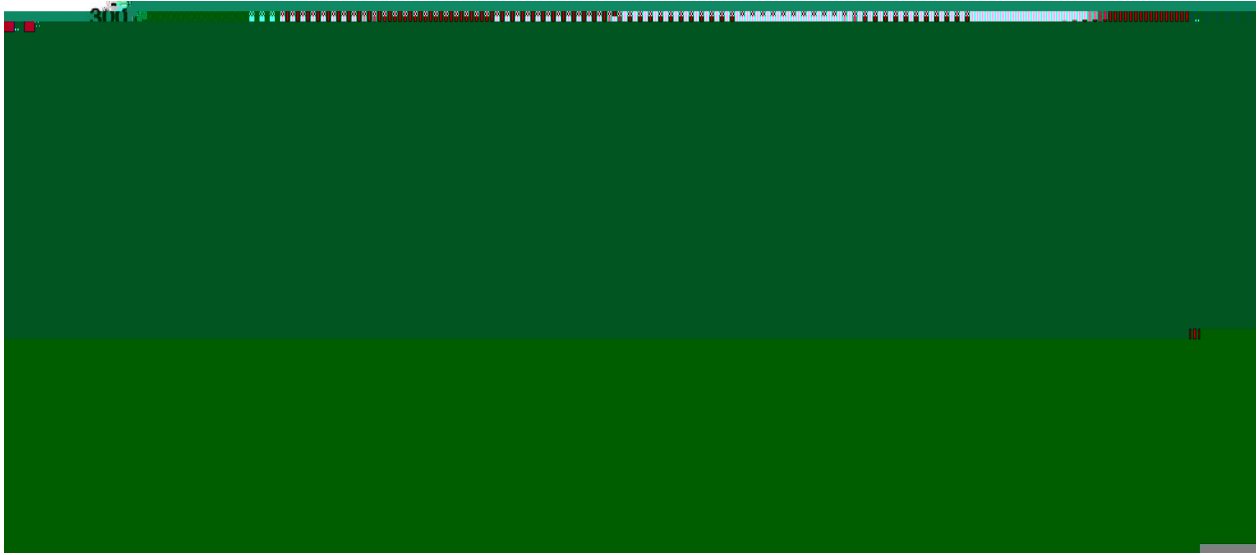
Note:

BR: Company Code.

A1281: Product Type.

O:  $h_{FE}$  Classifications Symbol

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



- |   |     |     |    |          |       |   |
|---|-----|-----|----|----------|-------|---|
| 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.            |

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: mm3)		
	只袋	袋盒	只盒	盒箱	只箱	袋	盒	箱

/ AMMO

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm3)	
	只纸带	纸带盒	纸带层盒	盒箱	只箱	盒	箱
							小箱 大箱