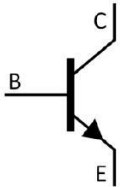


TO-92LM NPN Silicon NPN transistor in a TO-92LM Plastic Package.

, 2SA684 2 3
 Low $V_{CE(sat)}$, 2~3W output in complementary pair with 2SA684.

AF power amplifier and driver applications.

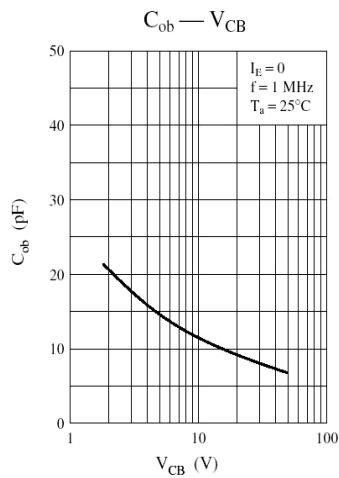
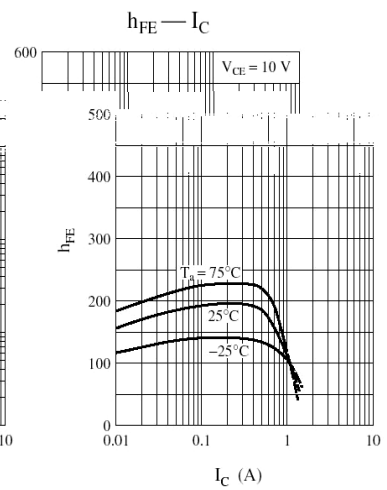
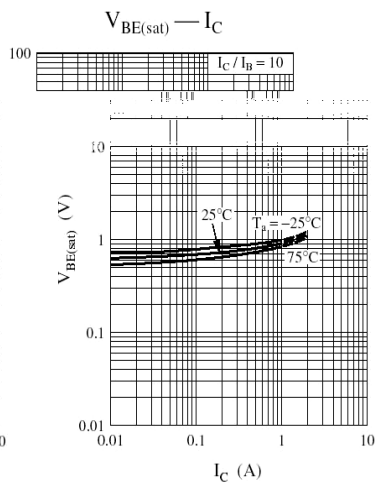
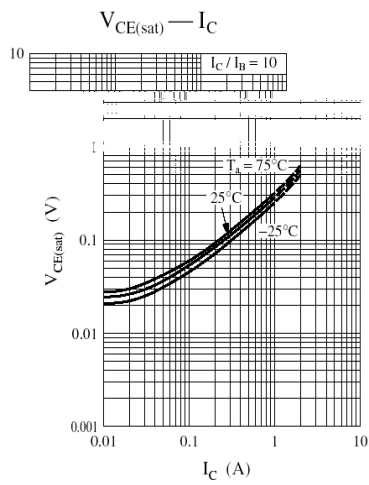
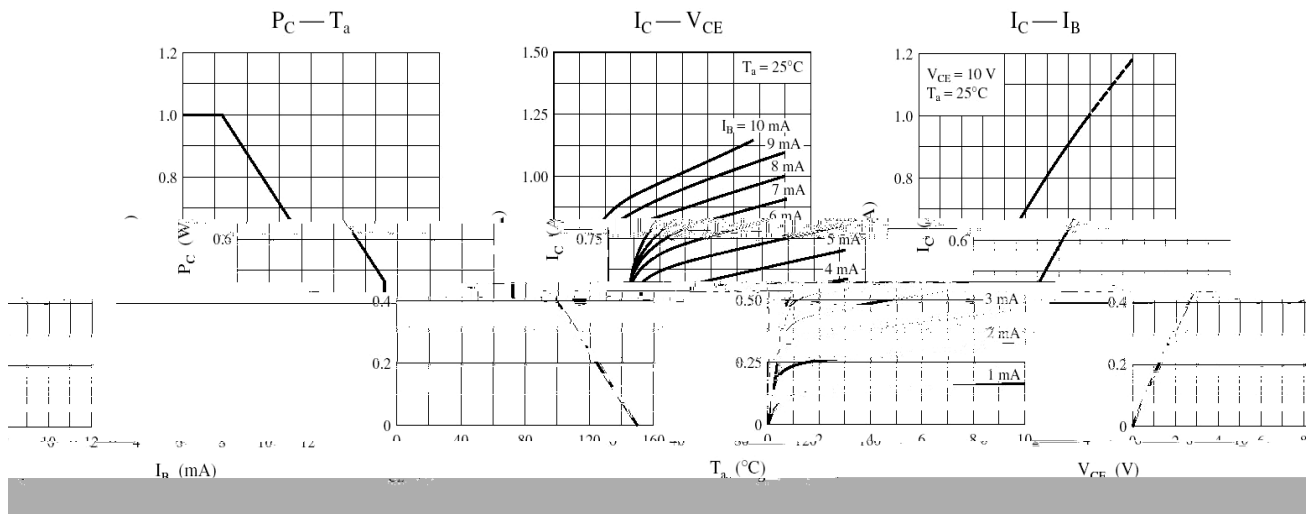


PIN1 Base PIN 2 Collector PIN 3 Emitter

h_{FE} Classifications Symbol	Q	R	S
h_{FE} Range	85~170	120~240	170~340

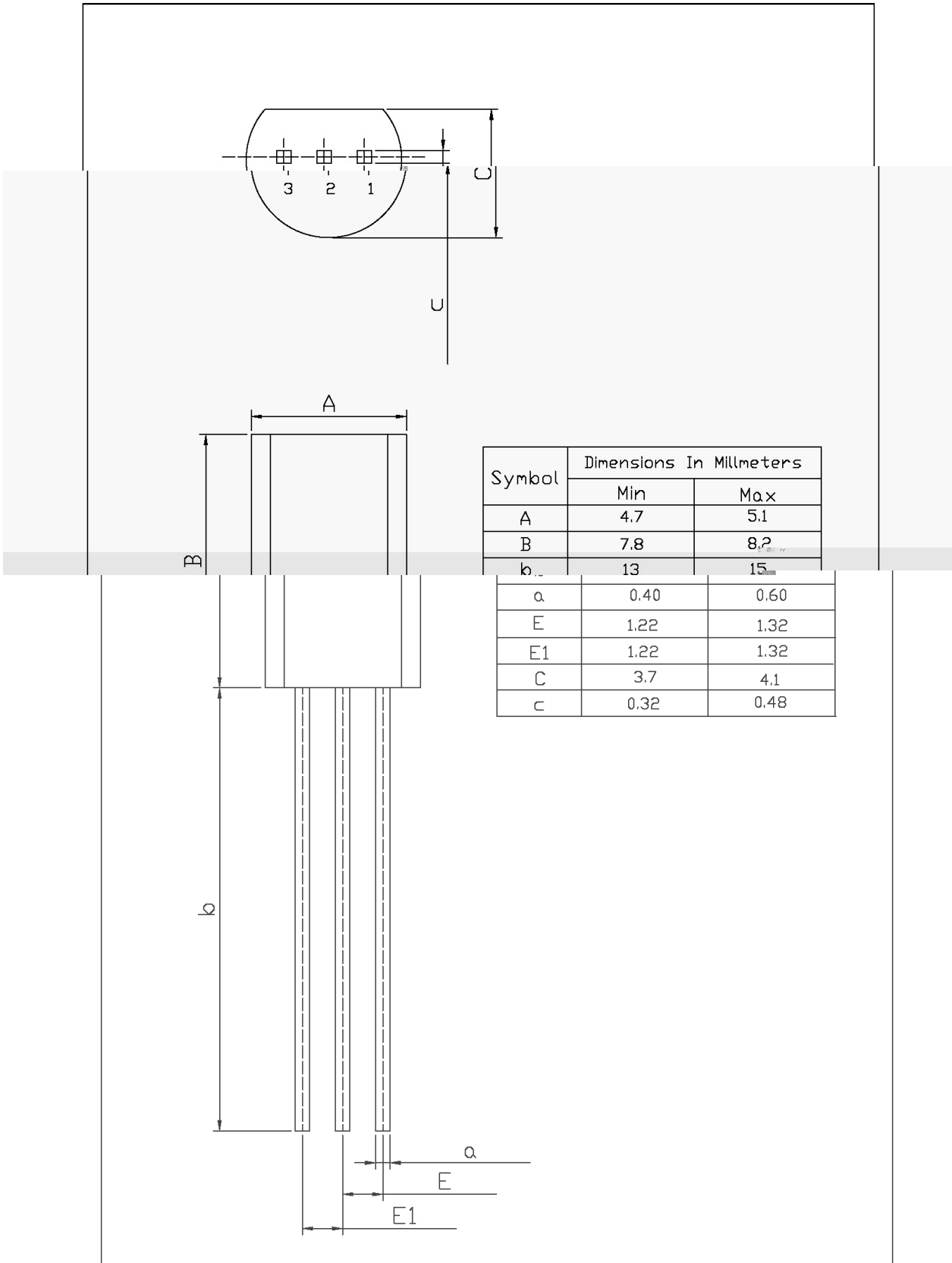
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	1.0	A
Collector Current – Continuous(Pulse)	I_{CP}	1.5	A
Collector Power Dissipation	P_C	1.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55~150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=10\mu A$ $I_E=0$	60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=2.0mA$ $I_B=0$	50			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=10\mu A$ $I_C=0$	5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=20V$ $I_E=0$			0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=10V$ $I_C=500mA$	85	160	340	
	$h_{FE(2)}$	$V_{CE}=5.0V$ $I_C=1.0A$	50	100		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=50mA$		0.2	0.4	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=500mA$ $I_B=50mA$		0.85	1.2	V
Transition Frequency	f_T	$V_{CE}=10V$ $I_C=50mA$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V$ $I_E=0$ $f=1.0MHz$		11	20	pF

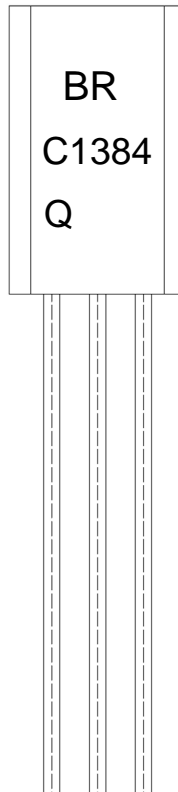


TO-92LM

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



BR:

C1384

Q: h_{FE}

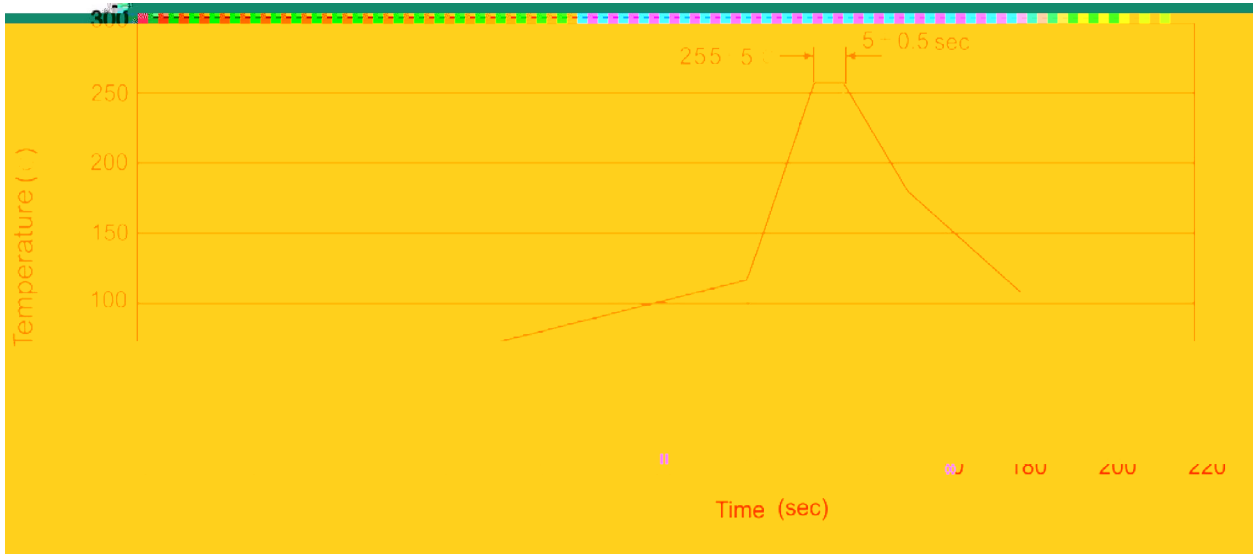
Note:

BR: Company Code.

C1384: Product Type.

Q: 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: 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