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

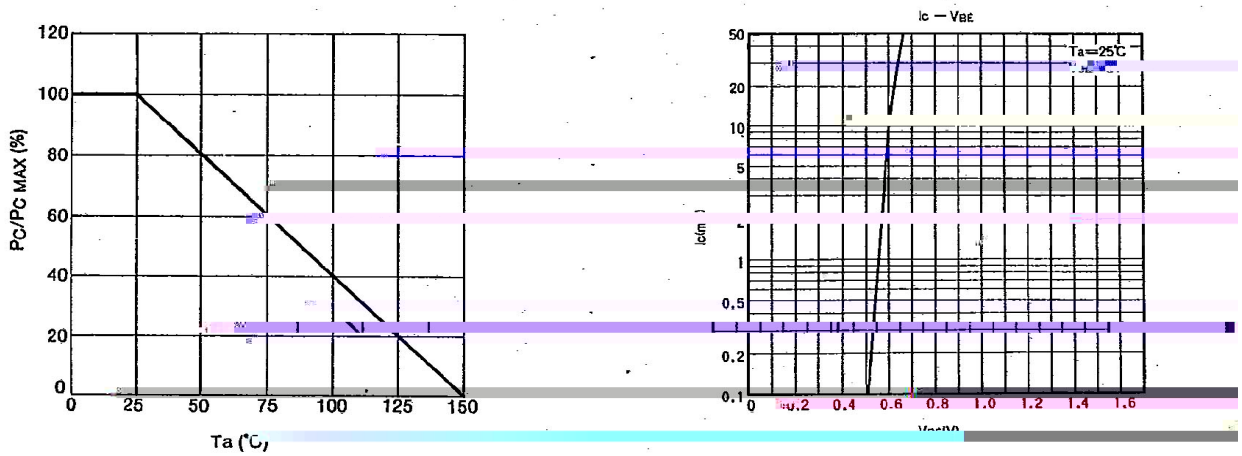
2SB1238

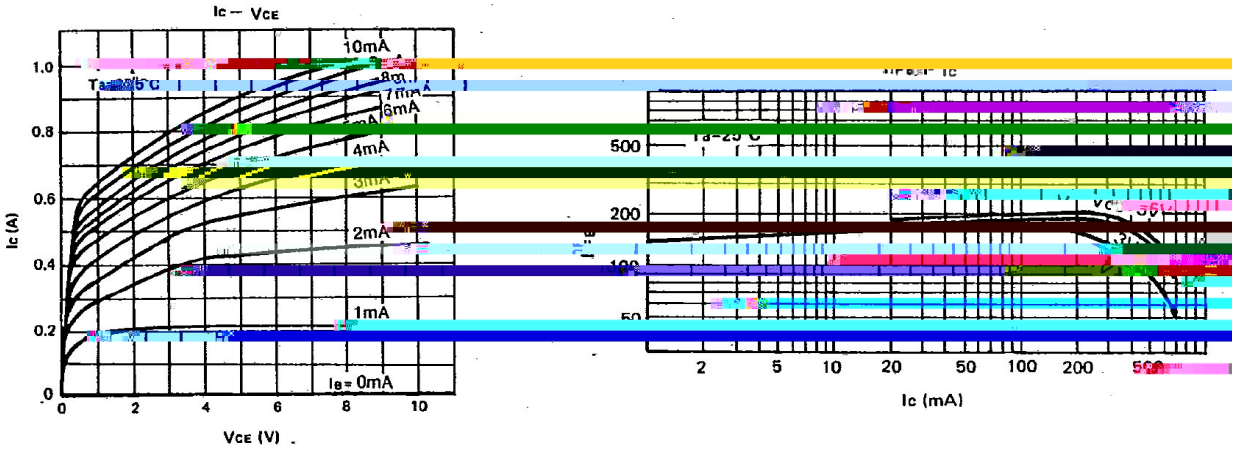
High breakdown voltage high current complementary pair with 2SB1238.

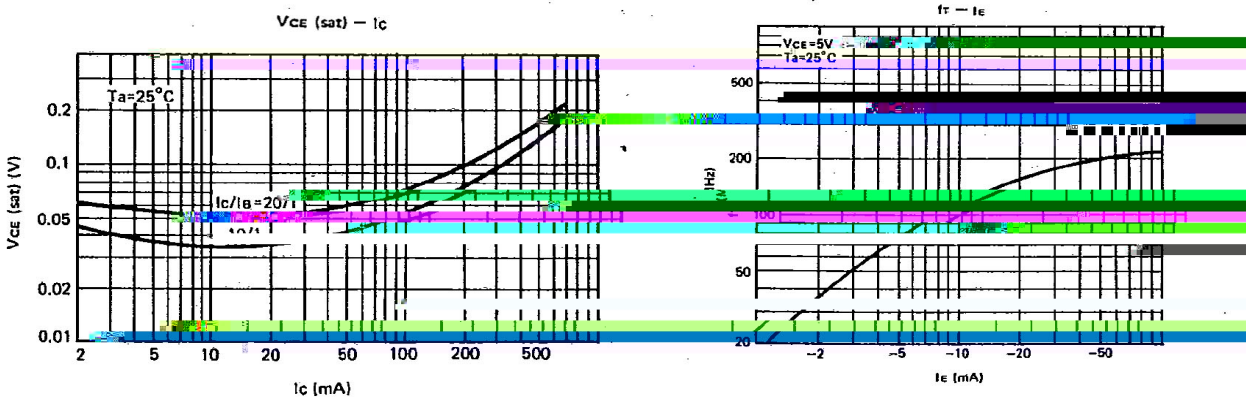
Medium power amplifier applications.

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	80	V
Collector to Emitter Voltage	V_{CEO}	80	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	0.7	A
Collector Power Dissipation	P_C	1.0	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

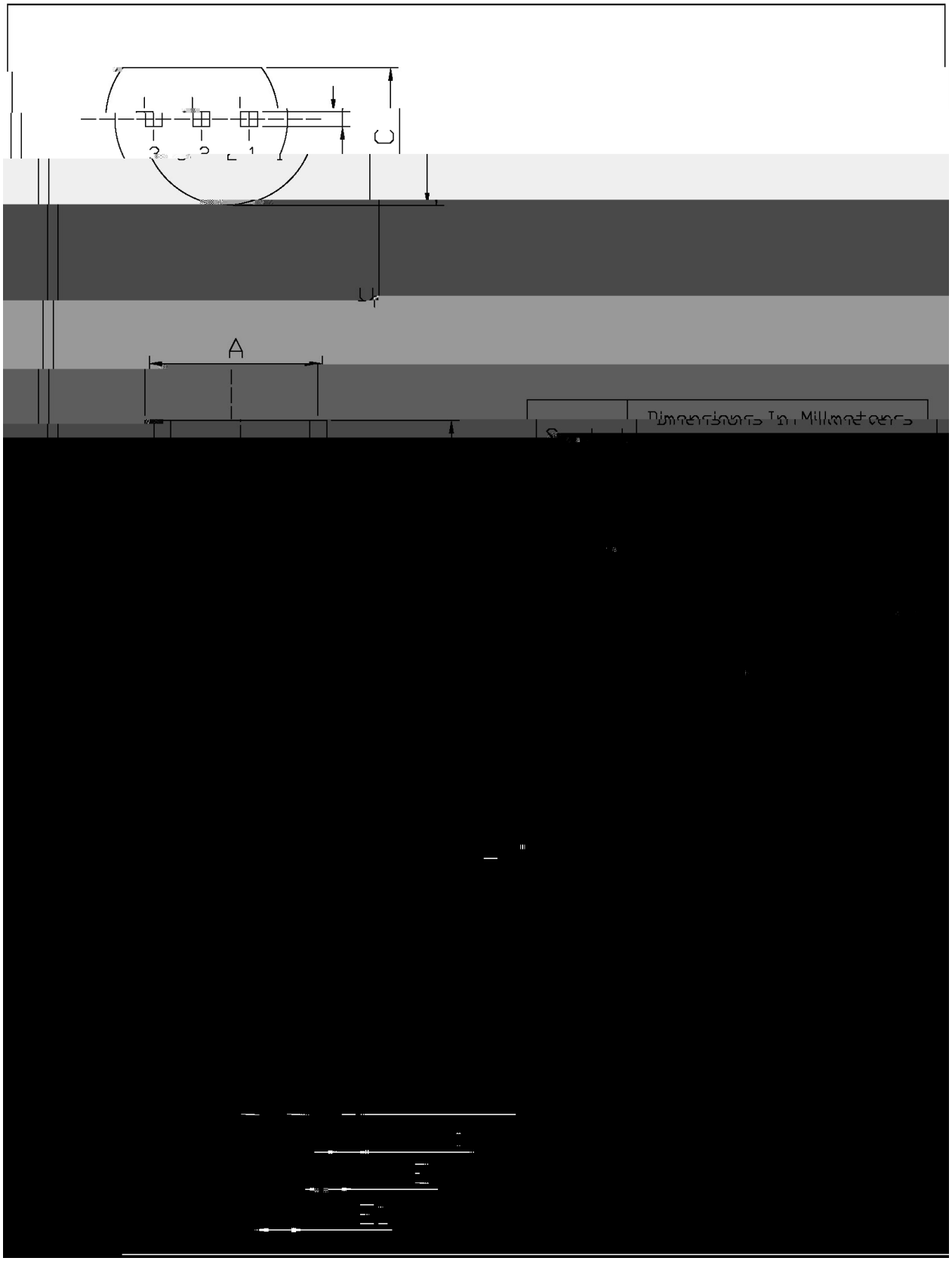
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=50 A I_B=0	80			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=2.0mA I_B=0	80			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=50 A I_B=0	5.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=50V I_E=0			0.5	A
Emitter Cut-Off Current	I_{EBO}	V_{EB}=4.0V I_C=0			0.5	A
DC Current Gain	h_{FE}	V_{CE}=3.0V I_C=0.1A	120		390	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=500mA I_B=50mA		0.2	0.4	V
Transition Frequency	f_T	V_{CE}=10V I_C=50mA f=100MHz		120		MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V I_E=0 f=1.0MHz		10		pF

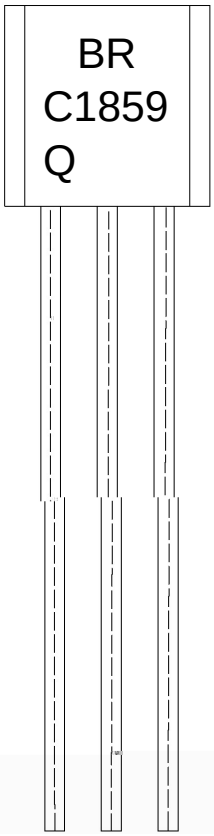

PC/PC MAX (%)
Ta (°C)
Ta=25°C


IC — VCE
10mA
8mA
7mA
6mA
4mA
2mA
1mA
IB=0mA
IC (A)
VCE (V)
IC (mA)


VCE (sat) — IC
Ta=25°C
IC/IB=20
VCE (sat) (V)
IC (mA)
fT — IE
VCE=5V
Ta=25°C
IE (mA)

TO-92 Unit: mm





BR:

C1859

Q: h_{FE}

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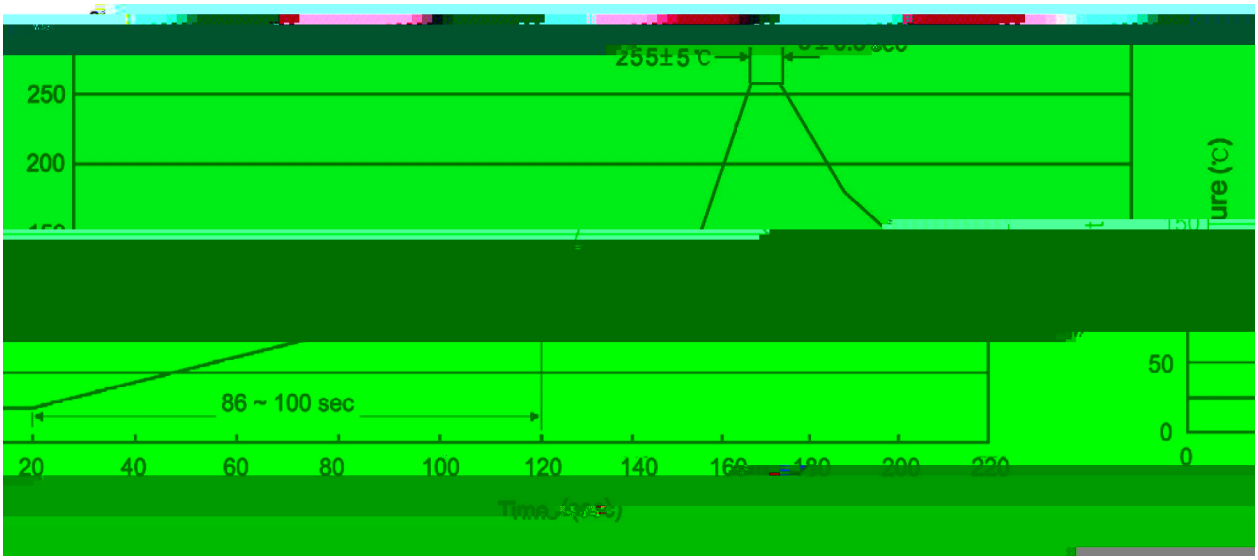
Note:

BR:	Company Code.
C1859:	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