

/ Descriptions

KF \$0) E GE Silicon NPN transistor in a TO-92 Plastic Package.

/ Features

)J9, -(
Complementary pair with 2SB561.

/ Applications

Low frequency power amplifier.

/ Equivalent Circuit



/ Pinning



PIN1 Base PIN 2 Collector PIN 3 Emitter

/ hFE Classifications & Marking

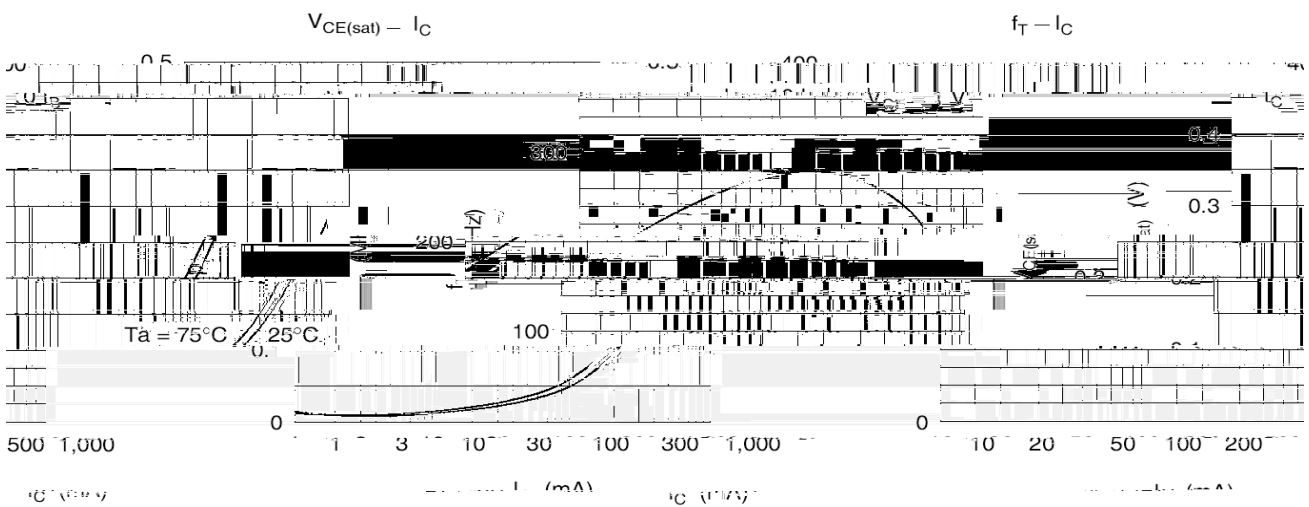
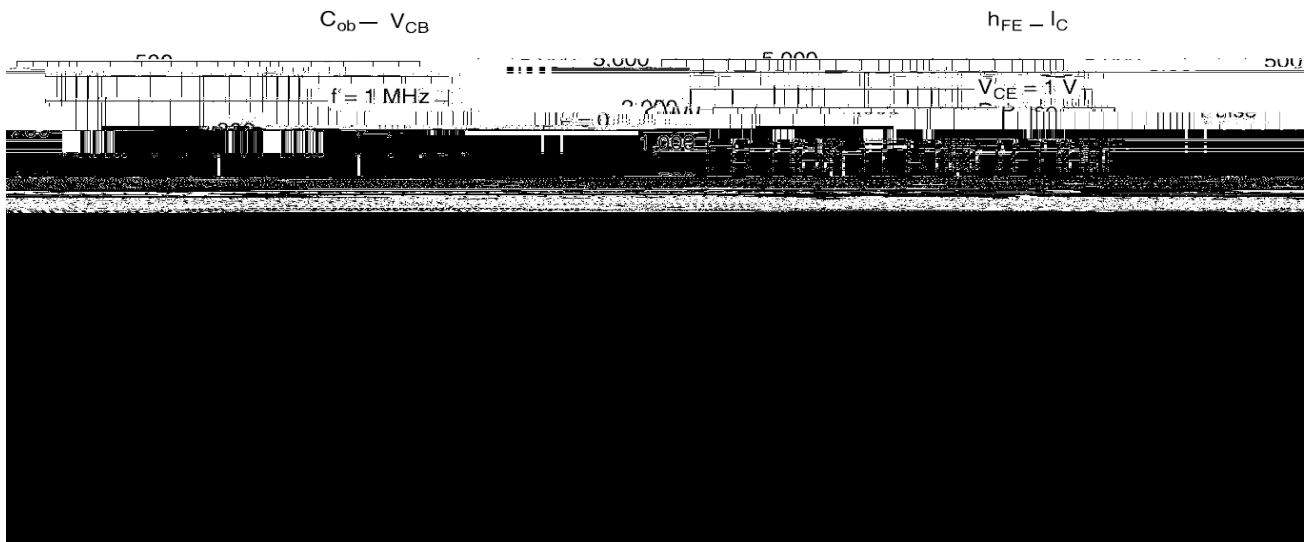
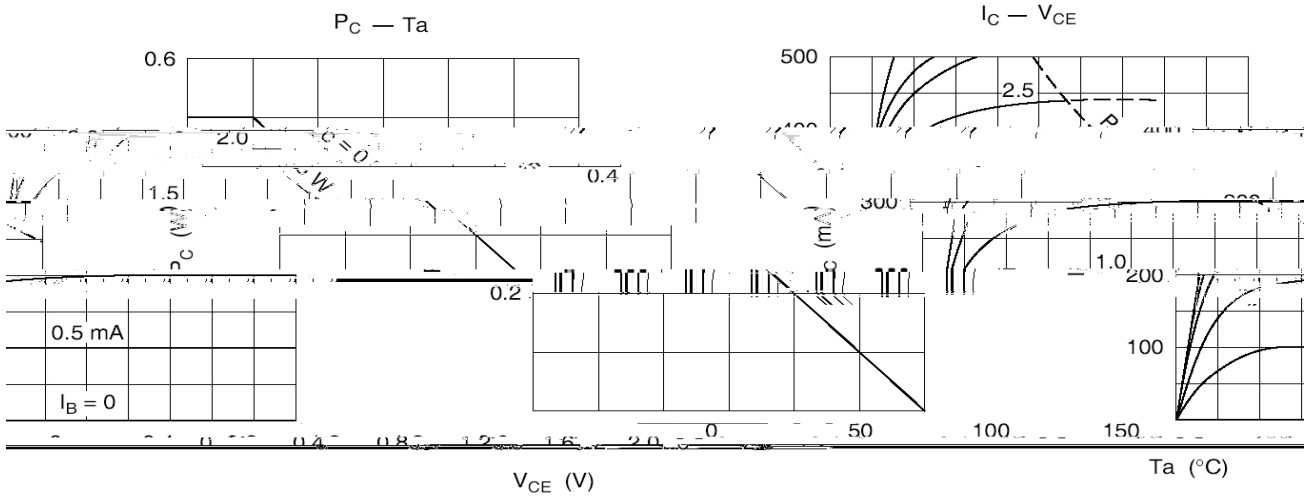
h _{FE} Classifications Symbol	B	C
h _{FE} Range	85~170	120~240

/ Absolute Maximum Ratings(Ta=25)

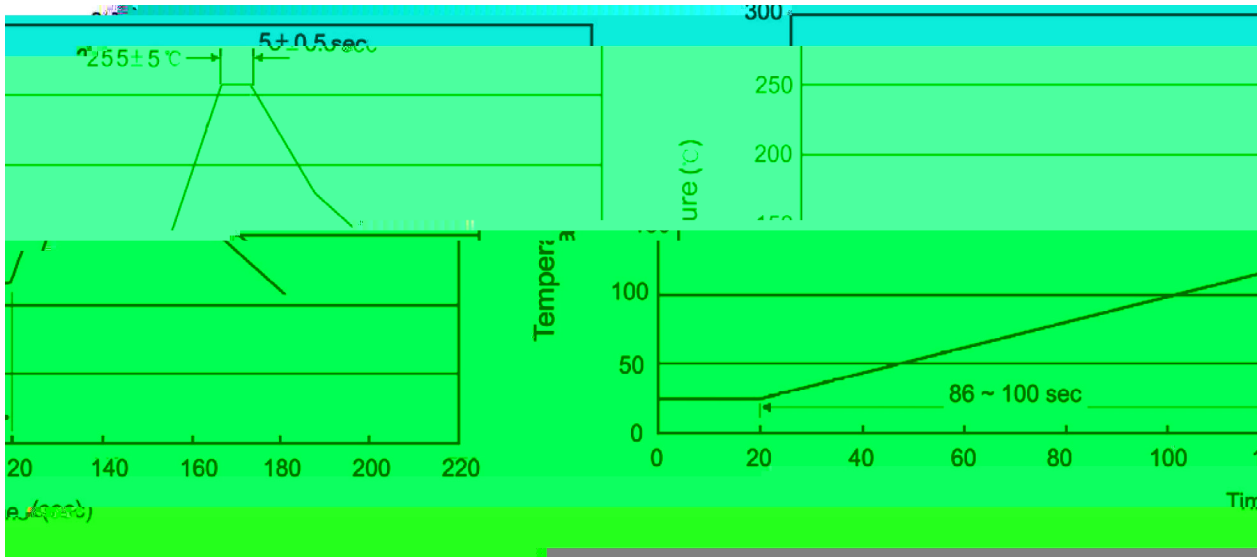
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	25	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	0.7	A
Peak Collector Current	I_{CM}	1.0	A
Collector Power Dissipation	P_C	0.5	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=10\text{ A}$ $I_E=0$	25			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=1.0\text{mA}$ $I_B=0$	20			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=10\text{ A}$ $I_C=0$	5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=20\text{V}$ $I_E=0$			1.0	A
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=4\text{V}$ $I_C=0$			1.0	A
DC Current Gain	h_{FE}	$V_{CE}=1.0\text{V}$ $I_C=0.15\text{A}$	85		240	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=0.5\text{A}$ $I_B=0.05\text{A}$		0.19	0.5	V
Base to Emitter Voltage	V_{BE}	$V_{CE}=1.0\text{V}$ $I_C=0.15\text{A}$		0.76	1.0	V
Transition Frequency	f_T	$V_{CE}=1.0\text{V}$ $I_C=0.15\text{A}$		280		MHz
Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$ $I_E=0$ $f=1.0\text{MHz}$		12		pF

/ Electrical Characteristic Curve



() / Temperature Profile for Dip Soldering(Pb-Free)



- 1 25 150 60 90sec;
- 2 255..5 5..0.5sec;
- 3 2 10 /sec.

Note:

- 1.Preheating:25~150 , Time:60~90sec.
- 2.Peak Temp.:255..5 , Duration:5..0.5sec.
- 3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

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

/ Packaging SPEC.

/ BULK

~~dB~~