

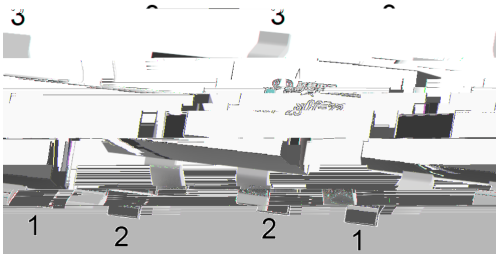
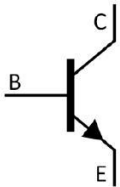
Rev.I May.-2023

SOT-23          NPN          Silicon NPN transistor in a SOT-23 Plastic Package.

S8550MG

Complementary pair with S8550MG,HF Product.

Power amplifier applications.



PIN1 Base      PIN 2 Emitter      PIN 3 Collector

h <sub>FE</sub> Classifications Symbol	B	C	D
h <sub>FE(1)</sub> Range	85 160	120 200	160 300
Marking	GY3B	GY3C	GY3D

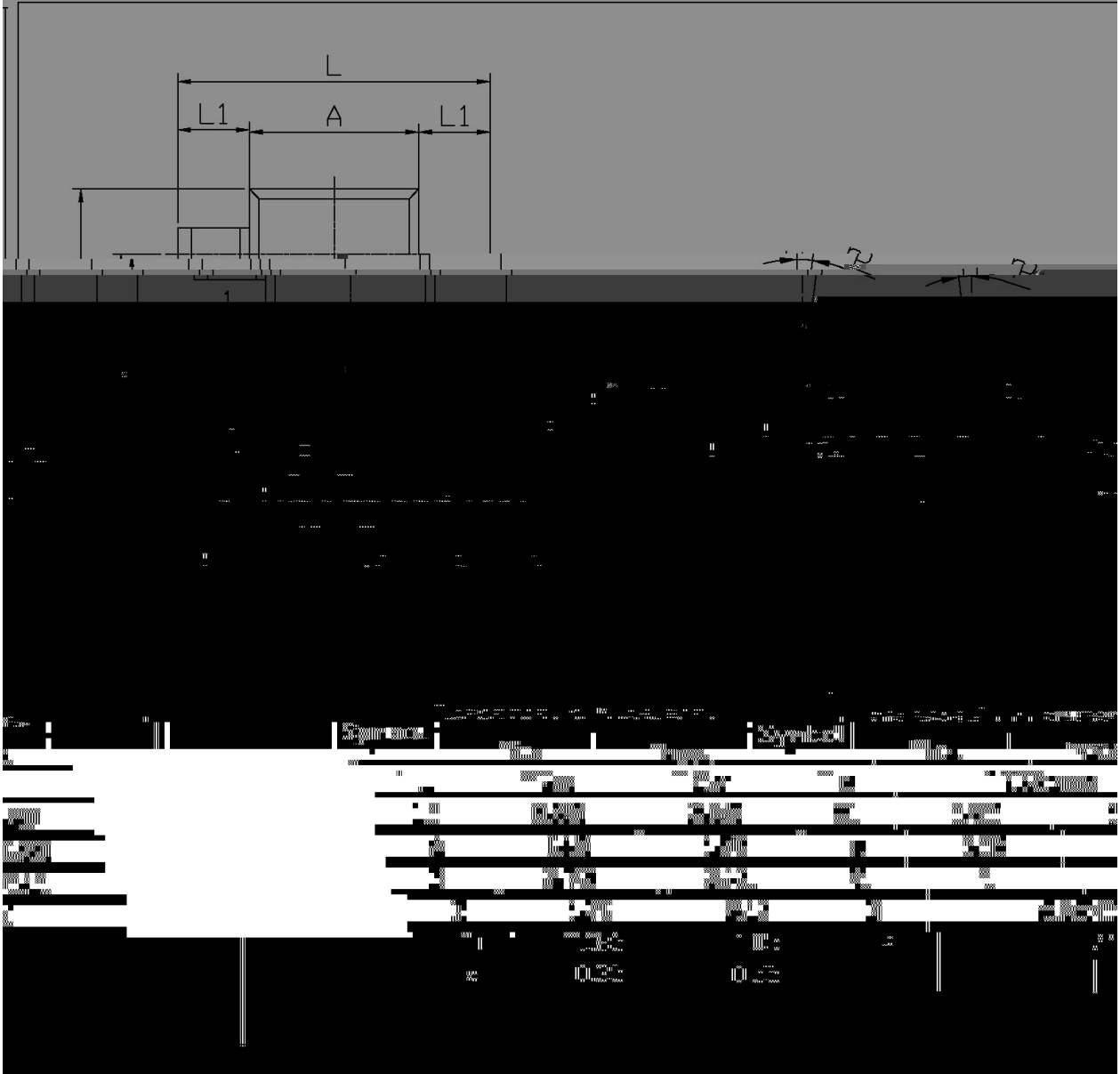
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	40	V
Collector to Emitter Voltage	$V_{CEO}$	25	V
Emitter to Base Voltage	$V_{EBO}$	6.0	V
Collector Current	$I_C$	800	mA
Base Current	$I_B$	200	mA
Collector Power Dissipation	$P_C$	200	mW
Junction Temperature	$T_j$	150	
Storage Temperature Range	$T_{stg}$	-55 150	

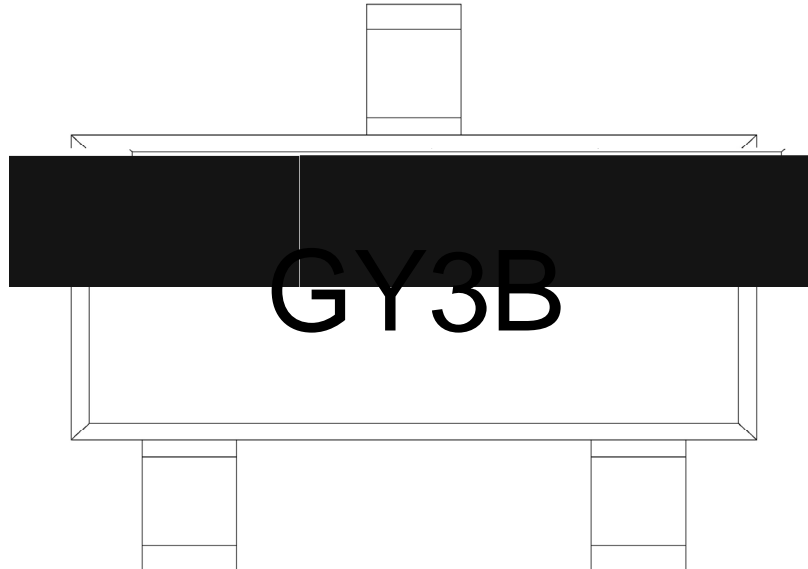
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	$V_{CBO}$	$I_C=0.1mA$ $I_E=0$	40			V
Collector to Emitter Breakdown Voltage	$V_{CEO}$	$I_C=2.0mA$ $I_B=0$	25			V
Emitter to Base Breakdown Voltage	$V_{EBO}$	$I_E=0.1mA$ $I_C=0$	6.0			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=35V$ $I_E=0$			0.1	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=6.0V$ $I_C=0$			0.1	$\mu A$
DC Current Gain	$h_{FE(1)}$	$V_{CE}=1.0V$ $I_C=100mA$	85		300	
	$h_{FE(2)}$	$V_{CE}=1.0V$ $I_C=500mA$	40			
	$h_{FE(3)}$	$V_{CE}=1.0V$ $I_C=5.0mA$	45			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=50mA$		0.28	0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=500mA$ $I_B=50mA$		0.98	1.2	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=1.0V$ $I_C=10mA$		0.66	1.0	V
Transition Frequency	$f_T$	$V_{CE}=10V$ $I_C=50mA$	100	190		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V$ $I_E=0$ $f=1.0MHz$		9.0		pF

Rev.I May.-2023

SQT-23

单位: mm





G

Y3

B            h<sub>FE</sub>

Note:

G            HF Product Code

Y3          Product Type Code

B            h<sub>FE</sub> Classifications Symbol Code

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Note:

- |   |         |           |   |
|---|---------|-----------|---|
| 1 | 150 180 | 60 90sec; | 1.Preheating:150~180 , Time:60~90sec.   |
| 2 | 245±5   | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 |         |           |   |