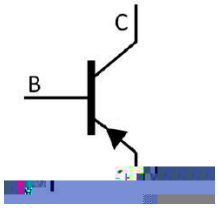
SOT-23 PNP Silicon PNP transistor in a SOT-23 Plastic Package.

Low current ,Low voltage ,S-mini package, HF Product.

General power amplifier application.





PIN1 Base PIN 2 Emitter PIN 3 Collector

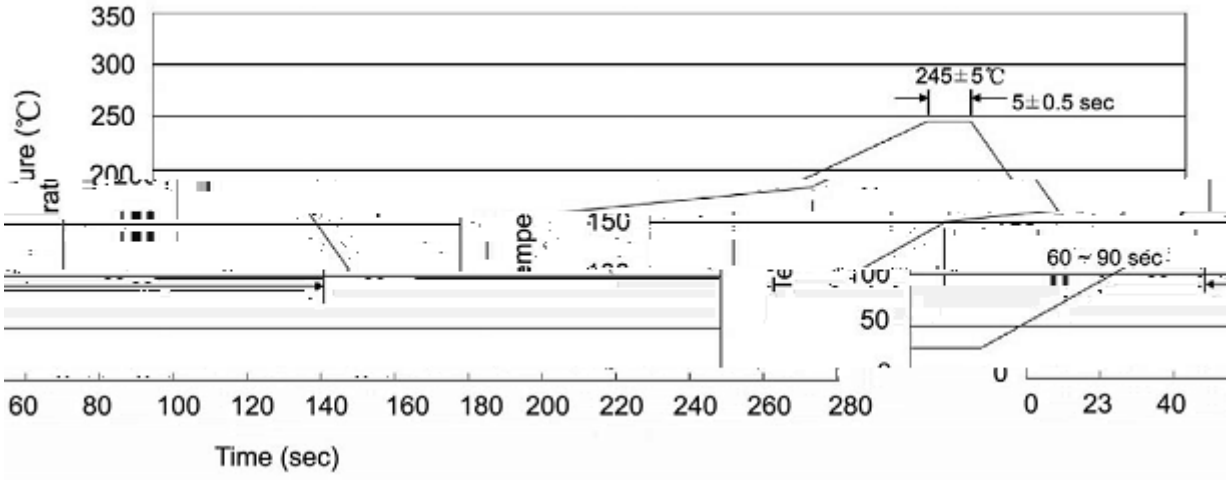
h_{FE} Classifications Symbol	A	B
h_{FE} Range	125 250	220 475
Marking	G3A	G3B

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-80	V
Collector to Emitter Voltage	V_{CEO}	-65	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current	I_C	-100	mA
Collector Power Dissipation	P_C	350	mW
Junction Temperature	T	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=-30V I_E=0			-0.015	μA
DC Current Gain	h_{FE}	V_{CE}=-5.0V I_C=-2.0mA	125		475	
Collector-Emitter Saturation Voltage	$V_{CE(sat)\ (1)}$	I_C=-10mA I_B=-0.5mA		-0.09	-0.3	V
	$V_{CE(sat)\ (2)}$	I_C=-100mA I_B=-5.0mA		-0.25	-0.65	V
Base-Emitter Saturation Voltage	$V_{BE(sat)\ (1)}$	I_C=-10mA I_B=-0.5mA		-0.7		V
	$V_{BE(sat)\ (2)}$	I_C=-100mA I_B=-5.0mA		-0.9		V
Base-Emitter Voltage	$V_{BE(ON)1}$	V_{CE}=-5.0V I_C=-2.0mA	-0.6	-0.65	-0.75	V
	$V_{BE(ON)2}$	V_{CE}=-5.0V I_C=-10mA			-0.82	V
Transition Frequency	f_T	V_{CE}=-5.0V I_E=10mA f=100MHz		150		MHz
Collector Output Capacitance	C_{ob}	V_{CB}=-10V I_E=0 f=1MHz		4.5		pF
Noise Figure	NF	V_{CE}=-6.0V I_C=-0.2mA R_g=2KΩ f=1KHz		2.0	10	dB


$I_C - V_{BE}$
$-V_{CE}$ = 5 V
T_{amb} = 25 °C
10^2
10
$V_{CEsat} - I_C$
$-I_C/-I_B$ = 20
0.5
0.4
0.3

Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

1 25 150 60 90sec;

2 245±5 5±0.5sec;

3 2 10 /sec.

1.Preheating:25~150 , Time:60~90sec.

2.Peak Temp.:245±5 , Duration:5±0.5sec.

3. Cooling Speed: 2~10 /sec.

260±5 10±1 sec.

Temp.:260±5 Time:10±1 sec

/ REEL

Package Type	Units					Dimension		(unit mm^3)