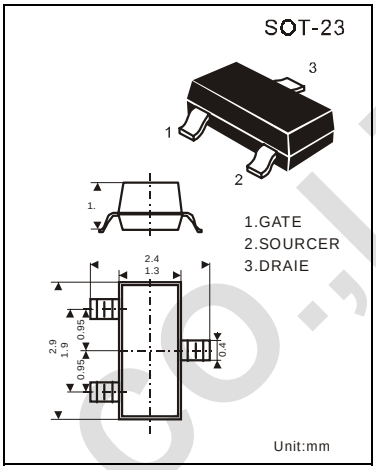
NPN EPITAXIAL SILICON TRANSISTOR

GENERAL PURPOSE TRANSISTOR

* Complement to MMBT2907ALT1
* Collector Dissipation: Pc(max)=225mW
* Collector-Emitter Voltage :Vceo= 40V



ABSOLUTE MAXIMUM RATINGS at Ta=25℃

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	Vcbo	75	V
Collector-Emitter Voltage	Vceo	40	V
Emitter-Base Voltage	Vebo	6	V
Collector Current	Ic	600	mA
Collector Dissipation Ta=25℃*	P_D	225	mW
Junction Temperature	Tj	150	℃
Storage Temperature	Tstg	-55-150	℃

ELECTRICAL CHARACTERISTICS at Ta=25℃

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BVcbo	75			V	Ic= 10uA Ie=0
Collector-Emitter Breakdown Voltage#	BVceo	40			V	Ic= 10mA Ib=0
Emitter-Base Breakdown Voltage	BVebo	6			V	Ie= 10uA Ic=0
Emitter Cutoff Current	Icex			10	nA	Vce= 60V Veb=3V
Collect Cutoff Current	Icbo			10	nA	Vcb= 60V Ie=0
Collect Cutoff Current	Icbo			10	nA	Vcb= 60VIe=0 Ta=125℃
Collect Cutoff Current	Iebo			10	nA	Vcb=3V Ic=0
DC Current Gain	Hfe1	35				Vce= 10V Ic= 0.1mA
DC Current Gain	Hfe2	50				Vce= 10V Ic= 1mA
DC Current Gain	Hfe3	75				Vce= 10V Ic= 10mA
DC Current Gain	Hfe4	100		300		Vce= 10V Ic= 150mA
DC Current Gain	Hfe5	40				Vce= 10V Ic= 500mA
Collector-Emitter Saturation Voltage	Vce(sat)			0.3	V	Ic= 150mA Ib= 15mA
Collector-Emitter Saturation Voltage	Vce(sat)			1	V	Ic= 500mA Ib= 50mA
Base-Emitter Saturation Voltage	Vbe(sat)	0.6		1.2	V	Ic=150mA Ib= 15mA
Base-Emitter Saturation Voltage	Vbe(sat)			2	V	Ic= 500mA Ib= 50mA
Output Base Capacitance	Cob			8	PF	Vcb=10V Ie=0 f=1MHz
Current Gain-Bandwidth Product	f_T	300			MHz	Vce= 20V Ic= 20mA f=100MHz

* Total Device Dissipation : FR=1x0.75x0.062in Board,Derate 25℃.

\# Pulse Test : Pulse Width ≤300uS,Duty cycle ≤2%

DEVICE MARKING: 2SD602LT1=1P