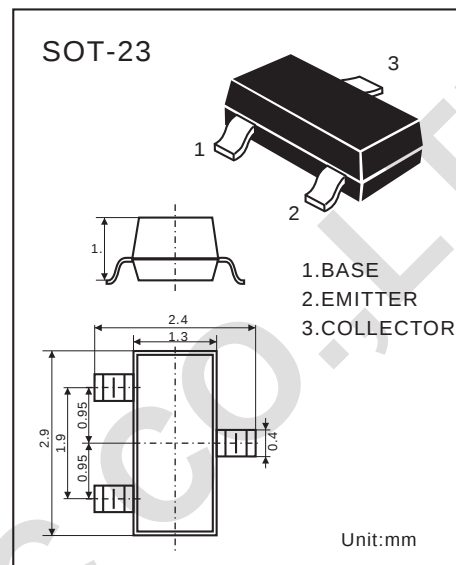


NPN EPITAXIAL SILICON TRANSISTOR

HIGH VOLTAGE TRANSISTOR

- Collector Dissipation: P_C -225mW ($T_a=25^\circ$)
- Collector-Emiller Voltage: $V_{CEO}=160V$



ABSOLUTE MAXIMUM RATINGS

(Ta=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	180	V
Collector-Emitter Voltage	V_{CEO}	160	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	600	mA
Collector Dissipation Ta=25°C*	P_D	225	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~150	°C

Electrical Characteristics

(Ta=25°C)

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Collector-Base Breakdown Voltage	BV_{CBO}	180			V	$I_C=100\mu A$, $I_E=0$
Collector-Emitter Breakdown Voltage#	BV_{CEO}	160			V	$I_C=1mA$, $I_B=0$
Emitter-Base Breakdown Voltage	BV_{EBO}	6			V	$I_E=10\mu A$, $I_C=0$
Collector-Base Cutoff Current	I_{CBO}			50	nA	$V_{CB}=120V$, $V_C=0$
Emitter-Base Cutoff Current	I_{EBO}			50	nA	$V_{CB}=4V$, $I_C=0$
DC Current Gain	h_{FE1}	80				$V_{CE}=5V$, $I_C=1mA$
DC Current Gain	h_{FE2}	80				$V_{CE}=5V$, $I_C=-10mA$
DC Current Gain	h_{FE3}	30		250		$V_{CE}=5V$, $I_C=50mA$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.5	V	$I_C=50mA$, $I_B=5mA$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.15	V	$I_C=10mA$, $I_B=1mA$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			1	V	$I_C=50mA$, $I_B=1mA$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			1	V	$I_C=10mA$, $I_B=1mA$
Current Gain-Bandwidth Product	f_T	100		300	MHZ	$V_{CE}=10V$, $I_C=10mA$, $f=100MHz$

*Total Device Dissipation:FR=1X0.75X0.062 in Board Derate 25°C

#Pulse Test: Pulse Width 300uS Duty cycle 2%

DEVICE MARKING:

2N5551S=Z1

Typical Characteristics

