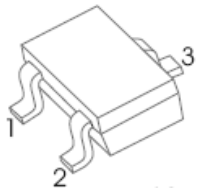
TRANSISTOR (PNP)	**SOT-323 Plastic-Encapsulate Transistors**

SOT-323



1. BASE
2. EMITTER
3. COLLECTOR

Features

- Complementary to MMST3904

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-40	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-200	mA
P_C	Collector Power Dissipation	200	mW
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	625	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55～+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$*	I_C=-10μA, I_E=0	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$*	I_C=-1mA, I_B=0	-40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$*	I_E=-10μA, I_C=0	-5			V
Base cut-off current	I_{BL}*	V_{CE}=-30V, $V_{EB(Off)}$=-3V			-50	nA
Collector cut-off current	I_{CEX}*	V_{CE}=-30V, $V_{EB(Off)}$=-3V			-50	nA
DC current gain	h_{FE}*	V_{CE}=-1V, I_C=-100μA	60			
		V_{CE}=-1V, I_C=-1mA	80			
		V_{CE}=-1V, I_C=-10mA	100		300	
Collector-emitter saturation voltage	$V_{CE(sat)}$*	I_C=-10mA, I_B=-1mA			-0.2	V
		I_C=-50mA, I_B=-5mA			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$*	I_C=-10mA, I_B=-1mA	-0.65		-0.85	V
		I_C=-50mA, I_B=-5mA			-0.95	V
Transition frequency	f_T	V_{CE}=-20V,I_C=-10mA , f=100MHz	250			MHz
Collector output capacitance	C_{ob}	V_{CB}=-5V, I_E=0, f=1MHz			4.5	pF
Collector output capacitance	C_{ib}	V_{EB}=-0.5V, I_E=0, f=1MHz			10	pF
Delay time	t_d	V_{CC}=-3V, $V_{BE(off)}$=-0.5V, I_C=-10mA,			35	ns
Rise time	t_r	I_{B1}=-1mA			35	ns
Storage time	t_s	V_{CC}=3V, I_C=-10mA, I_{B1}= I_{B2}=-1mA			225	ns
Fall time	t_f				75	ns

*Pulse test: pulse width ≤300μs, duty cycle≤ 2.0%.

Typical Characteristics