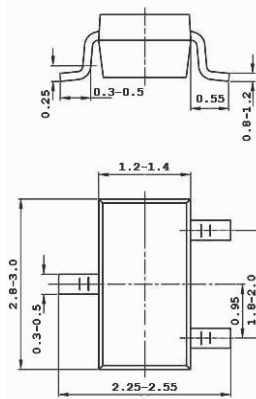
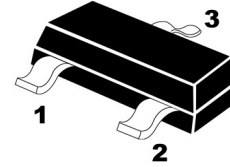


TRANSISTOR (PNP)
Plastic-Encapsulate Transistor
FEATURES

- Power Dissipation

MARKING: 589
SOT-23

1. BASE
2. EMITTER
3. COLLECTOR



Unit:mm

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

MAXIMUM RATINGS

Parameters	Symbols	Value	UNITS
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-30	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current - Continuous	I_C	-2	A
Total Device Dissipation	P_D	310	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	403	°C/W
Junction and Storage Temperature	T_J, T_{stg}	-55-150	°C

ELECTRICAL CHARACTERISTICS

Parameters	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-100\mu A, I_E=0$	-50			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-10mA, I_B=0$	-30			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-100\mu A, I_C=0$	-5			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-30V, I_E=0$			-0.1	μA
Collector-Emitter Cut-Off Current	I_{CES}	$V_{CES}=-30V$			-0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-4V, I_C=0$			-0.1	μA
DC Current Gain	h_{FE1}	$V_{CE}=-2V, I_C=-1mA$	100			
	h_{FE2}	$V_{CE}=-2V, I_C=-500mA$	100		300	
	h_{FE3}	$V_{CE}=-2V, I_C=-1A$	80			
	h_{FE4}	$V_{CE}=-2V, I_C=-2A$	40			
Collector-Emitter Saturation Voltage	$V_{CE(sat)1}$	$I_C=-500mA, I_B=-50mA$			-0.25	V
	$V_{CE(sat)2}$	$I_C=-1A, I_B=-100mA$			-0.3	V
	$V_{CE(sat)3}$	$I_C=-2A, I_B=-200mA$			-0.65	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-1A, I_B=-100mA$			-1.2	V
Base-Emitter Turn-On Voltage	$V_{BE(on)}$	$V_{CE}=-2V, I_C=-1A$			-1.1	V
Transition Frequency	f_T	$V_{CE}=-5V, I_C=-100mA, f=100MHz$	100			MHz
Collector Output Capacitance	C_{ob}	$f=1MHz$			15	pF

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