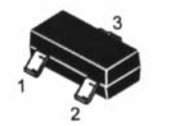
@vic

MMBT2222ALT1

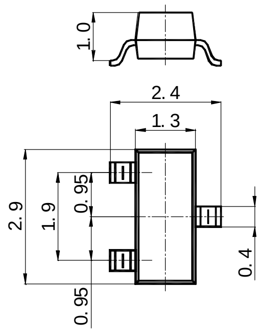
SOT-23 Plastic-Encapsulate Transistors

MMBT2222ALT1 TRANSISTOR (NPN)

SOT-23



1. BASE
2. EMITTER
3. COLLECTOR



Unit: mm

FEATURES

Power dissipation

P_{CM}: 0.3 W (Tamb=25℃)

Collector current

I_{CM}: 0.6 A

Collector-base voltage

$V_{(BR)CBO}$: 75 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS (Tamb=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	75			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= 10mA, I_B=0	40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10μA, I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=70V, I_E=0			0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}=35V, I_B=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 3V, I_C=0			0.1	μA
DC current gain	$H_{FE(1)}$	V_{CE}=10V, I_C= 150mA	100		300	
	$H_{FE(2)}$	V_{CE}=10V, I_C= 1mA	50			
Collector-emitter saturation voltage	V_{CE}(sat)	I_C=500mA, I_B= 50mA			0.6	V
Base-emitter saturation voltage	V_{BE}(sat)	I_C=500mA, I_B= 50mA			1.2	V
Transition frequency	f_T	V_{CE}=20V, I_C= 20mA f=100MHz	300			MHz

DEVICE MARKING:

MMBT2222A = 1P