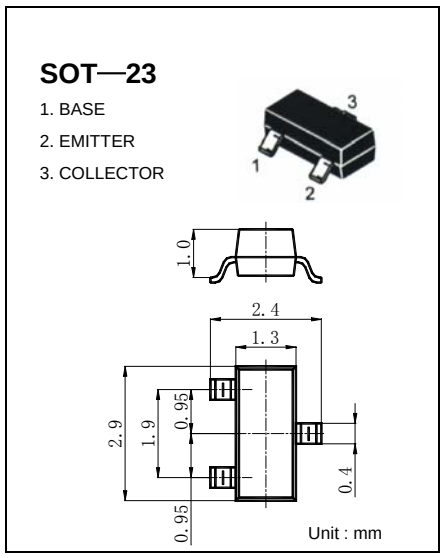
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-23 Plastic-Encapsulate Transistors

MMBTA13，14 TRANSISTOR（NPN）



FEATURES

Power dissipation

P_{CM} : 0.3W（Tamb=25℃）

Collector current

I_{CM} : 0.3A

Collector-base voltage

$V_{(BR)CBO}$: 30V

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	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	Ic= 100μA， I_E=0		30		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	Ic= 100uA， I_B=0		30		V
Collector-emitter breakdown voltage	$V_{(BR)EBO}$	I_E= 100μA， I_C=0		10		V
Collector cut-off current	I_{CBO}	V_{CB}=30 V， I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 10V， I_C=0			0.1	μA
DC current gain	$h_{FE(1)}$ *	V_{CE}=5V, I_C= 10mA	MMBTA13	5000		
			MMBTA14	10000		
	$h_{FE(2)}$ *	V_{CE}=5V, I_C= 100mA	MMBTA13	10000		
			MMBTA14	20000		
Collector-emitter saturation voltage	$V_{CE\ (sat)}$*	I_C=100 mA, I_B=0.1mA			1.5	V
Base-emitter voltage	V_{BE}*	V_{CE}=5V,I_C= 100mA			2.0	V
Transition frequency	f_T	V_{CE}=5V, I_C= 10mA f=100MHz		125		MHz

* Pulse Test : pulse width≤300μs，duty cycle≤2%。

Marking : MMBTA13:K2D；MMBTA14：K3D