

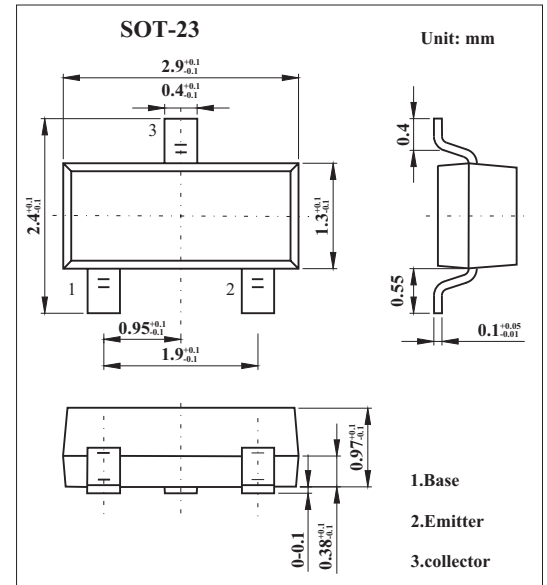
SOT-23 Plastic-Encapsulate Transistors

Features

- PNP silicon planar
- High Voltage Transistor

MECHANICAL DATA

- Case style: SOT-23 molded plastic
- Mounting position: any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	-120	V
Collector-emitter voltage	V _{CEO}	-100	V
Emitter-base voltage	V _{EBO}	-5	V
Peak collector current	I _{CM}	-2	A
Collector current	I _C	-1	A
Base current	I _B	-200	mA
Power dissipation	P _{tot}	500	mW
Operating and storage temperature range	T _j , T _{stg}	-55 to +150	°C

PACKAGE INFORMATION

Device	Package	Shipping
FMMT593	SOT-23	3000/Tape&Reel

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-100μA	-120			V
Collector-emitter breakdown voltage *	V _{(BR)CEO}	I _C =-10mA	-100			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-100μA	-5			V
Collector cutoff current	I _{CBO}	V _{CB} =-100V			-100	nA
Collector-Emitter Cut-Off Current	I _{CES}	V _{CE} =-100V			-100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =-4V			-100	nA
Collector-emitter saturation voltage *	V _{CE(sat)}	I _C =-250mA, I _B =-25mA			-0.2	V
		I _C =-500mA, I _B =-50mA			-0.3	V
Base-emitter saturation voltage *	V _{BE(sat)}	I _C =-500mA, I _B =-50mA			-1.1	V
Base-emitter voltage *	V _{BE(ON)}	I _C =-1mA, V _{CE} =-5V			-1.0	V
Static Forward Current Transfer Ratio	h _{FE}	I _C =-1mA, V _{CE} =-5V	100			
		I _C =-250mA, V _{CE} =-5V*	100			
		I _C =-500mA, V _{CE} =-5V*	100		300	
		I _C =-1A, V _{CE} =-5V,	50			
Current-gain-bandwidth product	f _T	I _C =-50mA, V _{CE} =-10V, f=100MHz	50			MHz
Output capacitance	C _{obo}	V _{CB} =-10V, f=1MHz			5	pF

* Pulse test: t_p = 300 μs; d ≤ 0.02.

Marking

Marking	593
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