

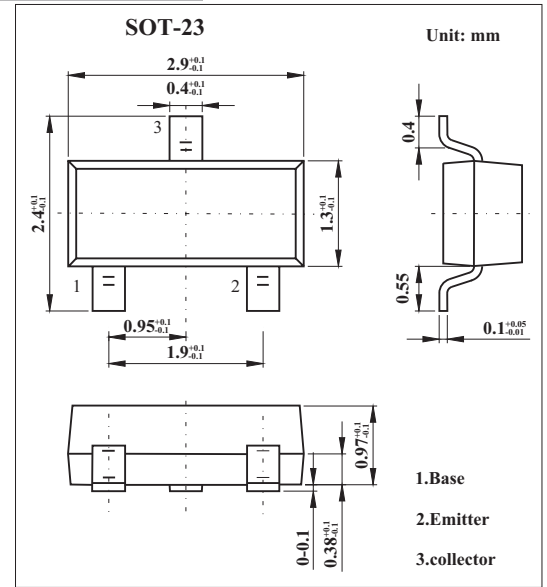
SOT-23 Plastic-Encapsulate Transistors

Features

- Switching transistors.

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 _{CBO}	30	V
Collector-emitter voltage	V _{CEO}	25	V
Emitter-base voltage	V _{EBO}	5	V
Collector current	I _C	200	mA
Power dissipation	P _{tot}	330	mW
Operating and storage temperature range	T _j , T _{stg}	-55 to +150	°C

PACKAGE INFORMATION

Device	Package	Shipping
FMMT4124	SOT-23	3000/Tape&Reel

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =10mA	30			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA	25			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10mA	5			V
Collector cutoff current	I _{CBO}	V _{CE} =20V			50	nA
Emitter cut-off current	I _{EBO}	V _{EB} =3V			50	nA
Collector-emitter saturation voltage *	V _{CE(sat)}	I _C =50mA, I _B =5mA			0.3	V
Base-emitter saturation voltage *	V _{BE(sat)}	I _C =50mA, I _B =5mA			0.95	V
DC current gain *	h _{FE}	I _C =2mA, V _{CE} =1V	120		360	
Current-gain-bandwidth product	f _T	I _C =10mA, V _{CE} =20V f=100MHz	300			MHz
Output capacitance	C _{obo}	V _{CB} =5V, I _E =0, f=140KHz			4	pF
Input capacitance	C _{ibo}	V _{BE} =0.5V, I _C =0, f=140KHz			8	pF
Noise figure	NF	V _{CE} =5V I _C =200mA, R _g =2K? f=30Hz to 15KHz at -3dB points			6	dB
Small signal current transfer	h _{fe}	I _C =2mA, V _{CE} =1V, f=1KHz	120	480		
Delay time	t _d	V _{CC} =3V, I _C =10mA, I _{B1} =1mA			24	ns
Rise time	t _r	V _{BE(off)} =0.5V			13	ns
Storage time	t _s	V _{CC} =3V, I _C =10mA			125	ns
Fall time	t _f	I _{B1} = I _{B2} =1mA			11	ns

* Pulse test: t_p ≤ 300 μs; d ≤ 0.02.

Marking

Marking	ZC
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