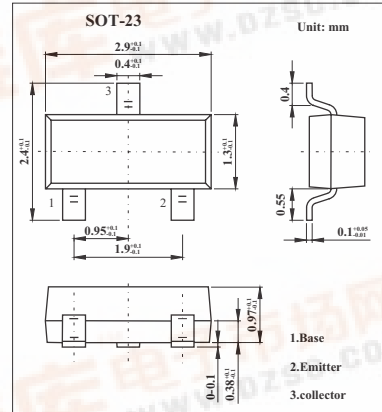


SMD Type Transistors

Small Signal Transistor  
FM5088

■ Features

- Small signal transistor.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CB0</sub>	35	V
Collector-emitter voltage	V <sub>CE0</sub>	30	V
Emitter-base voltage	V <sub>EB0</sub>	4.5	V
Collector current	I <sub>C</sub>	50	mA
Power dissipation	P <sub>tot</sub>	330	mW
Operating and storage temperature range	T <sub>j</sub> , T <sub>stg</sub>	-55 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =1mA, I <sub>B</sub> =0	35			V
Collector-emitter breakdown voltage *	V <sub>(BR)CEO</sub>	I <sub>C</sub> =100mA, I <sub>E</sub> =0*	30			V
Collector-base cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =20V, I <sub>E</sub> =0			50	nA
Emitter-base current	I <sub>EB0</sub>	V <sub>EB(off)</sub> =3V, I <sub>C</sub> =0			50	nA
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA			0.5	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA			0.8	V
DC current gain	h <sub>FE</sub>	I <sub>C</sub> =100μA, V <sub>CE</sub> =5V	300		900	
Current-gain-bandwidth product	f <sub>T</sub>	I <sub>C</sub> =500mA, V <sub>CE</sub> =5V f=20MHz	50			MHz
Output capacitance	C <sub>obo</sub>	V <sub>CB</sub> =5V, f=1MHz, I <sub>E</sub> =0			4	pF
Emitter-base capacitance	C <sub>ebo</sub>	V <sub>BE</sub> =0.5V, f=1MHz, I <sub>C</sub> =0			10	pF
Noise figure	NF	I <sub>C</sub> =200mA, V <sub>CE</sub> =5V, R <sub>g</sub> =10KΩ, f=10Hz to 15KHz			3	dB
Small signal current transfer ratio	h <sub>fe</sub>	I <sub>C</sub> =1mA, V <sub>CE</sub> =5V f=1KHz	350		1400	ns

\* Pulse test: t<sub>p</sub> ≤ 300 μs; d ≤ 0.02.

■ Marking

Marking	1Q
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