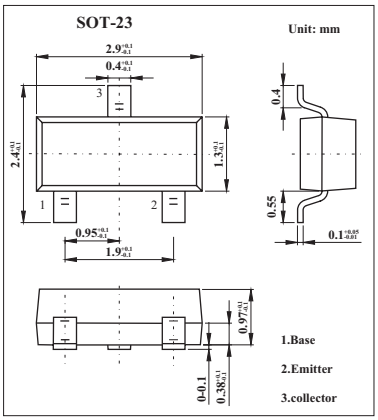
Small Signal Transistor

FMMT5209



Features

- Small signal transistor.

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	50	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	4.5	V
Collector current	I_C	50	mA
Power dissipation	P_{tot}	330	mW
Operating and storage temperature range	T_j,T_{stg}	-55 to +150	℃

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base cut-off current	I_{CBO}	V_{CB}=35V, I_E=0			50	nA
Emitter-base current	I_{EBO}	V_{EB}=3V, I_C=0			50	nA
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=10mA, I_B=1mA			700	mV
Base-emitter ON voltage	$V_{BE(on)}$	I_C=1mA, V_{CE}=5V			850	mV
DC current gain	h_{FE}	I_C=100μA, V_{CE}=5V	100		300	
Current-gain-bandwidth product	f_T	I_C=0.5mA, V_{CE}=5V,f=20MHz	30			MHz
Small signal current transfer ratio	hfe	I_C=1mA, V_{CE}=5V, f=1KHz	150		600	
Noise figure	NF	I_C=200μA, V_{CE}=5V, R_g=2KΩ, f=30Hz to 15KHz at -3dB points			3	dB
		I_C=200μA, V_{CE}=5V, R_g=2KΩ, f=1KHz to △f=200Hz			4	dB
Output capacitance	C_{obo}	V_{CB}=5V, I_E=0, f=140KHz			4	pF

Marking

Marking	2Q