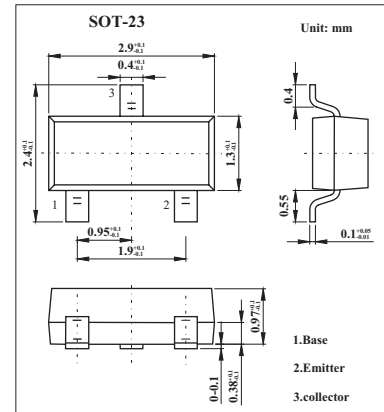


Avalanche Transistor

FMMT415

■ Features

- High speed pulse generators
- SOT23 NPN Silicon Planar



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	260	V
Collector-emitter voltage	V _{CEO}	100	V
Emitter-base voltage	V _{EB0}	6	V
Peak collector current	I _{CM}	60	A
Collector current	I _C	500	mA
Power dissipation	P _{tot}	330	mW
Operating and storage temperature range	T _j , T _{stg}	-55 to +150	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =1mA, T _{amb} = -55 to +150°C	260			V
Collector-emitter breakdown voltage *	V _{(BR)CEO}	I _C =100μA	100			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10μA	6			V
Collector cutoff current	I _{CBO}	V _{CB} =80V			0.1	μA
		V _{CB} =80V, T _{amb} =100°C			10	μA
Emitter cut-off current	I _{EBO}	V _{EB} =4V			0.1	μA
Collector-emitter saturation voltage *	V _{CE(sat)}	I _C =10mA, I _B =1mA			0.5	V
Base-emitter saturation voltage *	V _{BE(sat)}	I _C =10mA, I _B =1mA			0.9	V
Current in second breakdown	I _{SB}	V _C =200V, C _{CE} =620pF	15			A
		V _C =250V, C _{CE} =620pF	25			A
DC current gain *	h _{FE}	I _C =10mA, V _{CE} =10V	25			
Transition frequency	f _T	I _C =10mA, V _{CE} =20V, f=20MHz	40			MHz
Collector-base capacitance	C _{cb}	V _{CB} =20V, I _E =0, f=1MHz			8	pF

* Pulse test: t_p = 300 μs; d ≤ 0.02.

■ Marking

Marking	415
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