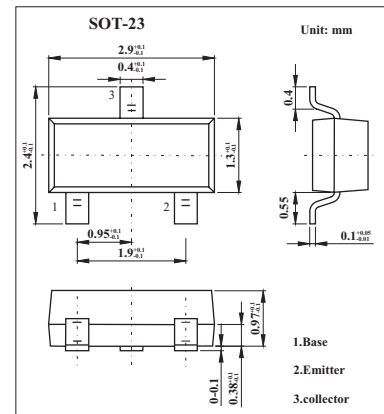


Power Darlington Transistor

FMMT614

■ Features

- hFE up to 5k at Ic= 500mA
- Fast switching
- Low VCE(sat) at High Ic



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CBO}	120	V
Collector-emitter voltage	V _{CEO}	100	V
Emitter-base voltage	V _{EBO}	10	V
Collector current	I _C	500	mA
Peak collector current	I _{CM}	2	A
Power dissipation	P _{tot}	500	mW
Operating and storage temperature range	T _j , T _{stg}	-55 to +150	°C

FMMT614

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	I _C =10μA	120	300		V
Collector-emitter breakdown voltage *	V(BR)CEO	I _C =10mA	100	130		V
Emitter-base breakdown voltage	V(BR)EBO	I _E =10μA	10	10		V
Collector cutoff current	I _{CBO}	V _{CB} =100V, I _E =0		0.02	10	nA
Collector cutoff current	I _{CES}	V _{CE} =100V, I _E =0			10	μA
Emitter cut-off current	I _{EBO}	V _{EB} =8V			100	nA
Collector-emitter saturation voltage *	V _{CE(sat)}	I _C =500mA, I _B =5mA I _C =100mA, I _B =0.1mA		0.9 0.78	1.0 0.9	V
Base-emitter saturation voltage *	V _{BE(sat)}	I _C =500mA, I _B =5mA		1.7	1.9	V
Base-emitter voltage *	V _{BE(ON)}	I _C =500mA, V _{CE} =5V		1.5	1.8	V
DC current gain *	h _{FE}	I _C =100mA, V _{CE} =5V	15K			
		I _C =500mA, V _{CE} =5V	5K			
Output capacitance	C _{obo}	V _{CB} =10V, f=100MHz		6		pF
Switching times	t _{on}	I _C =100μA, V _S =10V		0.7		μs
	t _{off}	I _B =0.1mA		2.5		μs

* Pulse test: t_p = 300 μs; d ≤ 0.02.

■ Marking

Marking	614
---------	-----