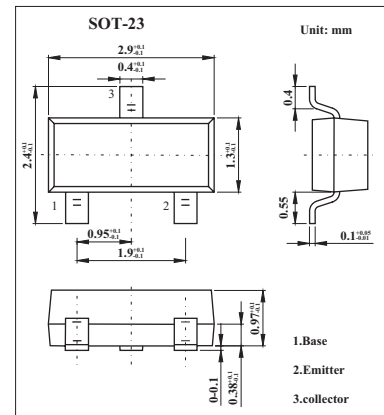


Medium Power Transistor

FMMTL718

■ Features

- Very low equivalent on-resistance; $R_{CE(sat)}=210\text{m}\Omega$ at 1.5A.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-20	V
Collector-emitter voltage	V_{CEO}	-20	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-1	A
Peak pulse current	I_{CM}	-2	A
Base current	I_B	-200	mA
Power dissipation	P_{tot}	-500	mW
Operating and storage temperature range	T_j, T_{stg}	-55 to +150	$^\circ\text{C}$

FMRTL718

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-100μA	-20	-65		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-10mA*	-20	-55		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-100μA	-5	-8.8		V
Collector-base cut-off current	I _{CBO}	V _{CB} =-15V			-10	nA
Emitter-base current	I _{EBO}	V _{EB} =-4V			-10	nA
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-100mA, I _B =-10mA* I _C =-500mA, I _B =-20mA* I _C =-1A, I _B =-50mA* I _C =-1.5A, I _B =-100mA		-33 -130 -230 -315	-50 -180 -320 -450	mV
Base-emitter saturation voltage	V _{BE(sat)}	I _C =-1.25A, I _B =-100mA*		-950	-1100	mV
Base-emitter ON voltage	V _{BE(on)}	I _C =-1.25A, V _{CE} =-2V*		-850	-1000	mV
DC current gain	h _{FE}	I _C =-10mA, V _{CE} =-2V I _C =-100mA, V _{CE} =-2V* I _C =-0.5A, V _{CE} =-2V* I _C =-1A, V _{CE} =-2V* I _C =-1.5A, V _{CE} =-2V*	300 300 200 120 50	500 450 320 200 80		
Current-gain-bandwidth product	f _T	I _C =-50mA, V _{CE} =-10V f=100MHz		265		MHz
Output capacitance	C _{obo}	V _{CB} =-10V, f=1MHz		9	12	pF
Turn-on time	t _(on)	I _C =-1A, V _{CC} =-10V		108		ns
Turn-off time	t _(off)	I _{B1} =I _{B2} =-10mA		121		ns

* Pulse test: t_p ≤ 300 μs; d ≤ 0.02.

■ Marking

Marking	L78
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