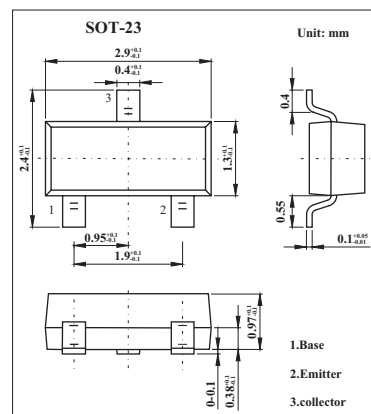


Medium Power Transistor

■ Features

- Very low equivalent on-resistance



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CBO}	50	V
Collector-emitter voltage	V _{CEO}	30	V
Emitter-base voltage	V _{EBO}	5	V
Peak collector current	I _{CM}	4	A
Collector current	I _C	1	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	°C

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =100μA	50			V
Collector-emitter breakdown voltage *	V _{(BR)CEO}	I _C =10mA	30			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA	5			V
Collector cutoff current	I _{CBO}	V _{CB} =30V			100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =4V			100	nA
Collector-emitter saturation voltage *	V _{CE(sat)}	I _C =1A, I _B =100mA	0.3			V
Base-emitter saturation voltage *	V _{BE(sat)}	I _C =1A, I _B =100mA				V
Base-emitter voltage *	V _{BE(ON)}	I _C =1A, V _{CE} =2V			1.0	V
Static Forward Current Transfer Ratio*	h _{FE}	I _C =1mA, V _{CE} =2V	100			
		I _C =1A, V _{CE} =2V	100		300	
		I _C =2A, V _{CE} =2V	60			
		I _C =4A, V _{CE} =2V	20			
Current-gain-bandwidth product	f _T	I _C =50mA, V _{CE} =10V, f=100MHz	150			MHz
Output capacitance	C _{obo}	V _{CB} =10V, f=1MHz			10	pF

* Pulse test: t_p ≤ 300 μs; d ≤ 0.02.