

General purpose transistor(50V,0.1A)

2SCR523M / 2SCR523EB / 2SCR523UB

●Structure

NPN silicon epitaxial planar transistor

●Features

1) Complements the 2SAR523M / 2SAR523EB / 2SAR523UB.

●Applications

Switch, LED driver

●Packaging specifications

Type	Package	VMT3	EMT3F	UMT3F
	Packaging Type	Taping	Taping	Taping
	Code	T2L	TL	TL
	Basic ordering unit (pieces)	8000	3000	3000
2SCR523M		○	—	—
2SCR523EB		—	○	—
2SCR523UB		—	—	○

● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V _{CB0}	50	V
Collector-emitter voltage	V _{CE0}	50	V
Emitter-base voltage	V _{EB0}	5	V
Collector current	I _C	100	mA
	I _{CP} *1	200	mA
Power dissipation	P _D *2	150	mW
		200	mW
Junction temperature	T _j	150	°C
Range of storage temperature	T _{stg}	-55 to +150	°C

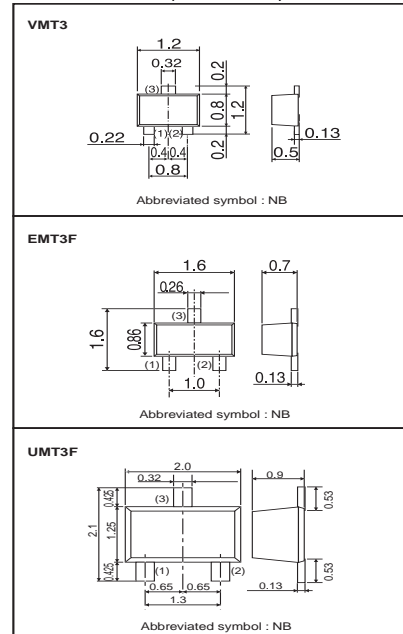
*1 Pw=1mS Single pulse

*2 Each terminal mounted on a recommended land

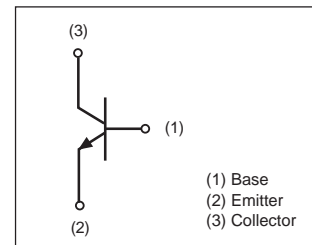
●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-emitter breakdown voltage	BV _{CE0}	50	—	—	V	I _C =1mA
Collector-base breakdown voltage	BV _{CB0}	50	—	—	V	I _C =50μA
Emitter-base breakdown voltage	BV _{EB0}	5	—	—	V	I _E =50μA
Collector cut-off current	I _{CBO}	—	—	0.1	μA	V _{CB} =50V
Emitter cut-off current	I _{EBO}	—	—	0.1	μA	V _{EB} =5V
Collector-emitter saturation voltage	V _{CE(sat)}	—	0.10	0.30	V	I _C =50mA, I _B =5mA
DC current gain	h _{FE}	120	—	560	—	V _{CE} =6V, I _C =1mA
Transition frequency	f _T	—	350	—	MHz	V _{CE} =10V, I _E =-10mA, f=100MHz
Output capacitance	C _{ob}	—	1.6	—	pF	V _{CB} =10V, I _E =0A, f=1MHz

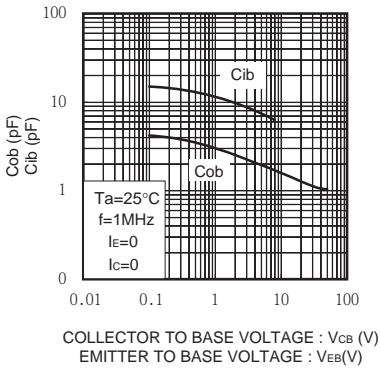
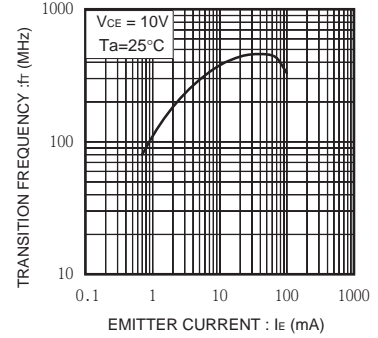
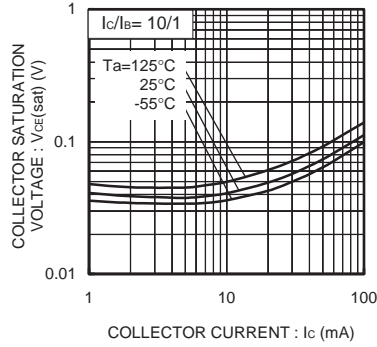
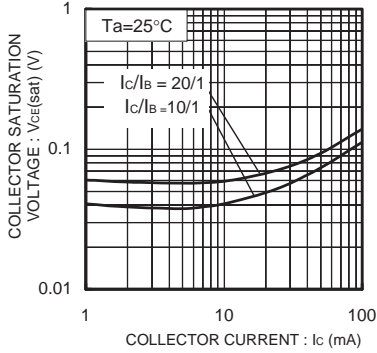
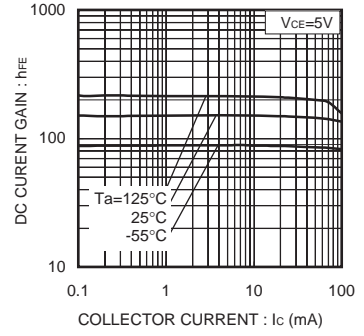
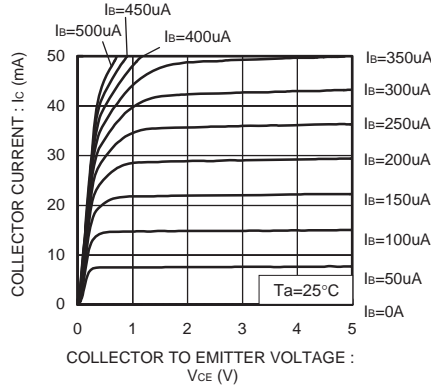
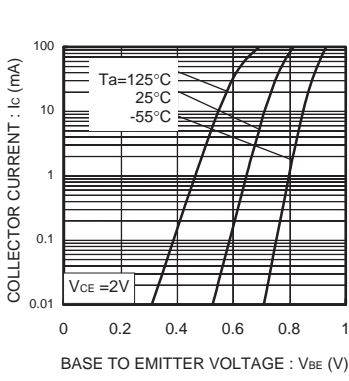
●Dimensions (Unit : mm)



●Inner circuit



●Electrical characteristics curves



Notes

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