

Power management (dual transistors)

VT6T1

●Structure

PNP silicon epitaxial planar transistor

●Features

Very small package with two transistors.

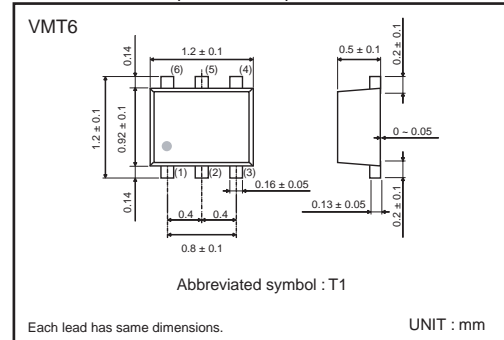
●Applications

Switch, LED driver

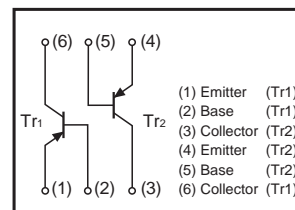
●Packaging specifications

Type	Package	Taping
	Code	T2R
	Basic ordering unit (pieces)	8000
VT6T1		○

●Dimensions (Unit : mm)



●Inner circuit



● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V _{CB0}	-20	V
Collector-emitter voltage	V _{CEO}	-20	V
Emitter-base voltage	V _{EBO}	-5	V
Collector current	I _c	-200	mA
	I _{CP} *1	-400	mA
Power dissipation	Total	P _D *2	150
	Element		120
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

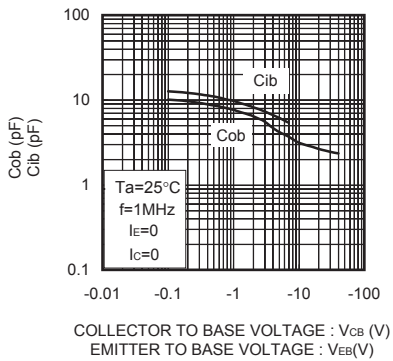
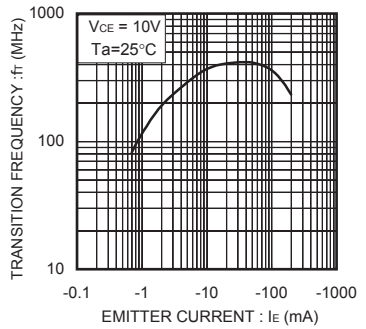
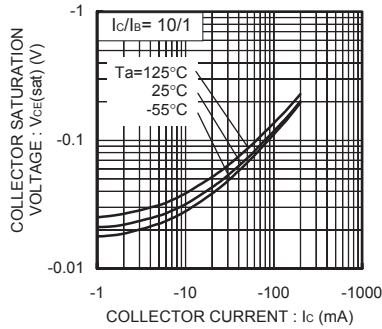
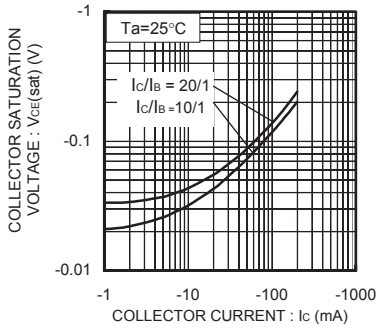
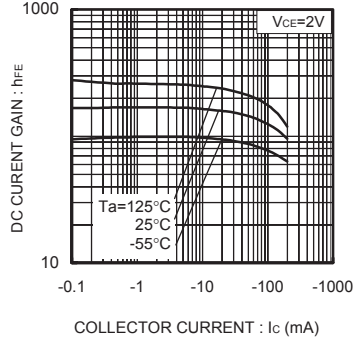
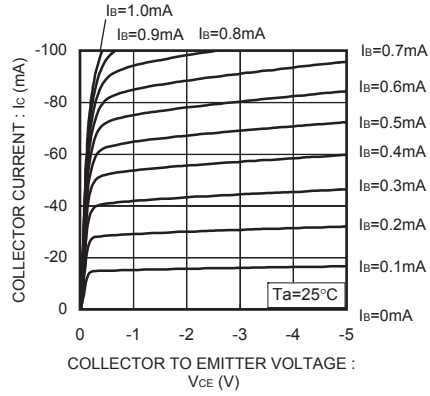
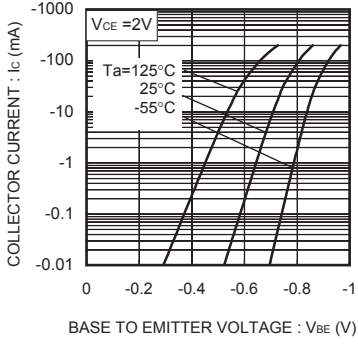
*1 Pw=1mS Single pulse

*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 _{CEO}	-20	-	-	V	I _c = -1mA
Collector-base breakdown voltage	BV _{CB0}	-20	-	-	V	I _c = -50μA
Emitter-base breakdown voltage	BV _{EBO}	-5	-	-	V	I _E = -50μA
Collector cut-off current	I _{cBO}	-	-	-0.1	μA	V _{CB} = -20V
Emitter cut-off current	I _{EBO}	-	-	-0.1	μA	V _{EB} = -5V
Collector-emitter saturation voltage	V _{CE(sat)}	-	-0.12	-0.30	V	I _c = -100mA, I _B = -10mA
DC current gain	h _{FE}	120	-	560	-	V _{CE} = -2V, I _c = -1mA
Transition frequency	f _T	-	350	-	MHz	V _{CE} = -10V, I _E =10mA, f=100MHz
Output capacitance	C _{ob}	-	3	-	pF	V _{CB} = -10V, I _E =0A, f=1MHz

●Electrical characteristics curves



Notes

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