

Transistors

General purpose (dual transistors)

IMT4

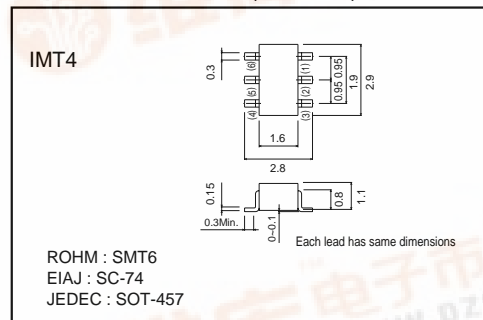
●Features

- 1) Two 2SA1514K chips in an AMT package.
- 2) High breakdown voltage.

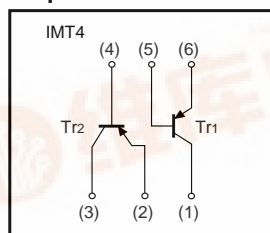
●Package, marking, and Packaging specifications

Part No.	IMT4
Package	SMT6
Marking	T4
Code	T108
Basic ordering unit (pieces)	3000

●External dimensions (Unit : mm)



●Equivalent circuit



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V _{CB0}	-120	V
Collector-emitter voltage	V _{CE0}	-120	V
Emitter-base voltage	V _{EB0}	-5	V
Collector current	I _c	-50	mA
Power dissipation	P _c	300 (TOTAL)	mW *
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

*200mW per element must not be exceeded.

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV _{CB0}	-120	-	-	V	I _c =-50μA
Collector-emitter breakdown voltage	BV _{CE0}	-120	-	-	V	I _c =-1mA
Emitter-base breakdown voltage	BV _{EB0}	-5	-	-	V	I _E =-50μA
Collector cutoff current	I _{cBO}	-	-	-0.5	μA	V _{CB} =-100V
Emitter cutoff current	I _{EBO}	-	-	-0.5	μA	V _{EB} =-4V
DC current transfer ratio	h _{FE}	180	-	820	-	V _{CE} =-6V, I _c =-2mA
Transition frequency	f _T	-	140	-	MHz	V _{CE} =-12V, I _E =2mA, f=100MHz *
Collector-emitter saturation voltage	V _{CE(sat)}	-	-	-0.5	V	I _c /I _B =-10mA/-1mA

*Transition frequency of the device.



Transistors

●Electrical characteristic curves

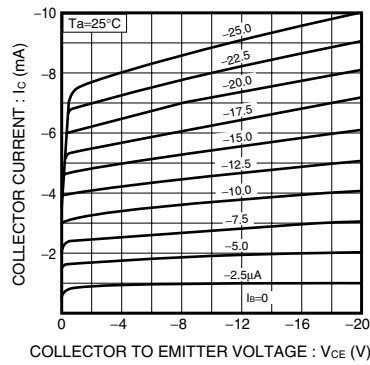


Fig.1 Ground emitter output characteristics

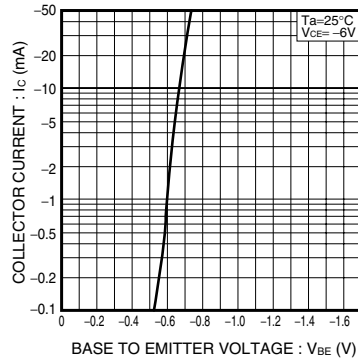


Fig.2 Ground emitter propagation characteristics

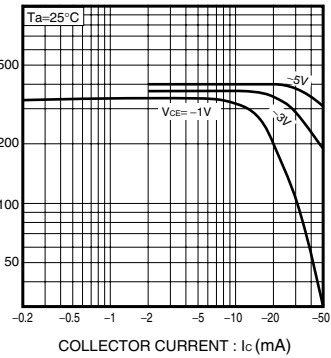


Fig.3 DC current gain vs. collector current

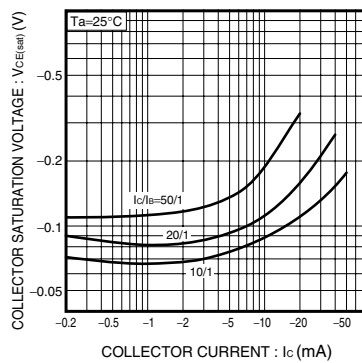


Fig.4 Collector-Emitter saturation voltage vs. collector current

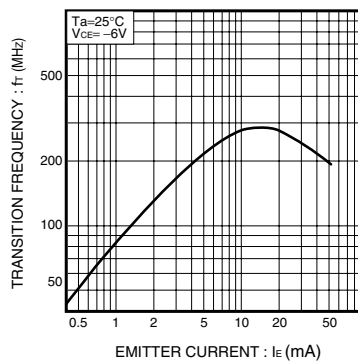


Fig.5 Transition frequency vs. emitter current

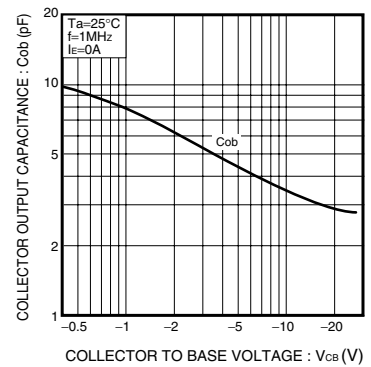


Fig.6 Collector output capacitance vs. collector-base voltage

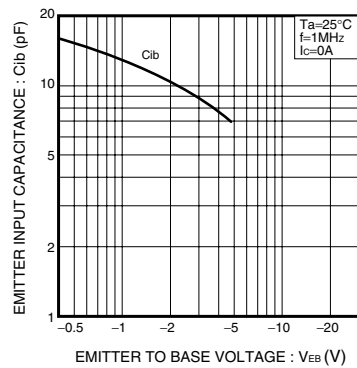


Fig.7 Emitter input capacitance vs. emitter-base voltage

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