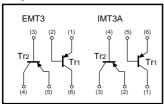
General purpose (dual transistors) **EMT3/IMT3A**

● Features

1) Two 2SA1037AK chips in a EMT or SMT package.

Equivalent circuits



●Absolute maximum ratings (Ta=25°C)

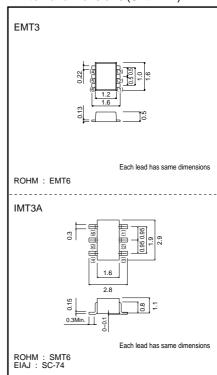
Parameter		Symbol	Limits	Unit
Collector-base voltage		Vсво	-60	V
Collector-emitter voltage		Vceo	-50	V
Emitter-base voltage		Vebo	-6	V
Collector current		Ic	-150	mA
Collector power dissipation	EMT3	Pc	150(TOTAL)	*1 mW
	IMT3A	FC	300(TOTAL)	*2
Junction temperature		Tj	150	°C
Storage temperature		Tstg	-55 to +150	°C

^{*1 120}mW per element must not be exceeded *2 200mW per element must not be exceeded

● Package, marking, and packaging specifications

Туре	EMT3	IMT3A
Package	EMT6	SMT6
Marking	T3	T3
Code	T2R	T108
Basic ordering unit (pieces)	8000	3000

●External dimensions (Unit : mm)



●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Тур.	Max.	Unit	Conditions
Collector-base breakdown voltage	ВУсво	-60	-	_	V	Ic=-50μA
Collector-emitter breakdown voltage	BVceo	-50	-	-	V	Ic=-1mA
Emitter-base breakdown voltage	BVEBO	-6	-	_	V	Iε=-50μA
Collector cutoff current	Ісво	-	-	-0.1	μΑ	Vcb=-60V
Emitter cutoff current	ІЕВО	-	-	-0.1	μΑ	V _{EB} =-6V
Collector-emitter saturation voltage	VcE(sat)	-	-	-0.5	V	Ic/I _B =-50mA/-5mA
DC current transfer ratio	hfe	120	-	560	-	Vce=-6V, Ic=-1mA
Transition frequency	fτ	-	140	-	MHz	Vce=-12V, Ie=2mA, f=100MHz *
Output capacitance	Cob	-	4	5	pF	Vce=-12V, Ie=0A, f=1MHz

^{*}Transition frequency of the device.

Electrical characteristics curves

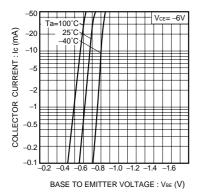


Fig.1 Grounded emitter propagation characteristics

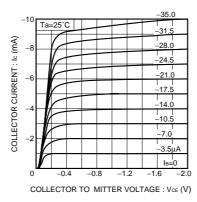


Fig.2 Grounded emitter output characteristics (I)

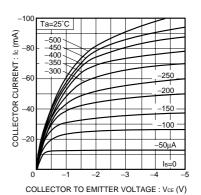


Fig.3 Grounded emitter output characteristics (II)

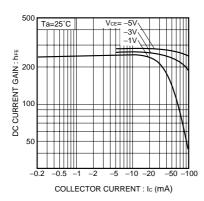


Fig.4 DC current gain vs. collector current (I)

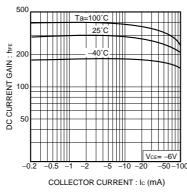


Fig.5 DC current gain vs. collector current (II)

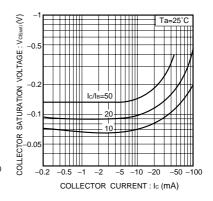


Fig.6 Collector-emitter saturation voltage vs. collector current (I)

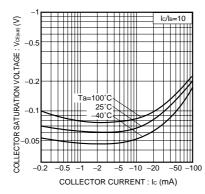


Fig.7 Collector-emitter saturation voltage vs. collector current (II)

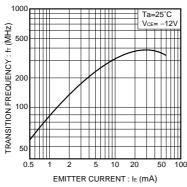


Fig.8 Gain bandwidth product vs. emitter current

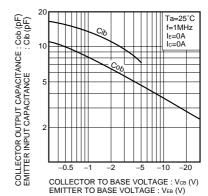


Fig.9 Collector output capacitance vs. collector-base voltage Emitter inputcapacitance vs. emitter-base voltage

Rev.A

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