

General purpose transistors (dual transistors)

EMX26

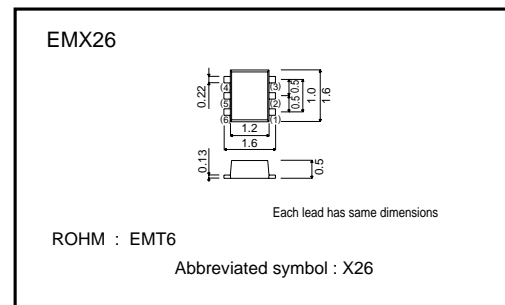
●Features

- 1) Two 2SD2654 chips in a EMT package.
- 2) Mounting possible with EMT3 automatic mounting machines.
- 3) Transistor elements are independent, eliminating interference.
- 4) Mounting cost and area can be cut in half.

●Structure

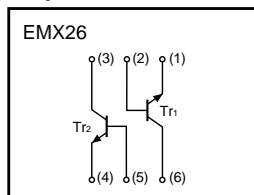
Epitaxial planar type
NPN silicon transistor

●External dimensions (Unit : mm)



The following characteristics apply to both Tr1 and Tr2.

●Equivalent circuit



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V_{CBO}	60	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	12	V
Collector current	I_C	0.15	A (DC)
		0.2	A (Pulse) *1
Power dissipation	P_d	150 (TOTAL)	mW *2
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

*1 Single pulse $P_w=100ms$.

*2 120mW per element must not be exceeded.

Transistors

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV _{CB0}	60	-	-	V	I _C =10μA
Collector-emitter breakdown voltage	BV _{CEO}	50	-	-	V	I _C =1mA
Emitter-base breakdown voltage	BV _{EB0}	12	-	-	V	I _E =10μA
Collector cutoff current	I _{CB0}	-	-	0.3	μA	V _{CB} =50V
Emitter cutoff current	I _{EB0}	-	-	0.3	μA	V _{EB} =12V
Collector-emitter saturation voltage	V _{CE(sat)}	-	-	0.3	V	I _C /I _B =50mA/5mA *
DC current transfer ratio	h _{FE}	820	-	2700	-	V _{CE} /I _C =5V/1mA *
Transition frequency	f _T	-	250	-	MHz	V _{CE} =5V, I _E =-10mA, f=100MHz *
Output capacitance	C _{ob}	-	3.5	*	pF	V _{CB} =5V, I _E =0A, f=1MHz

* Measured using pulse current.

●Packaging specifications

Type	Package	Taping
	Code	T2R
	Basic ordering unit (pieces)	8000
EMX26		○

●Electrical characteristic curves

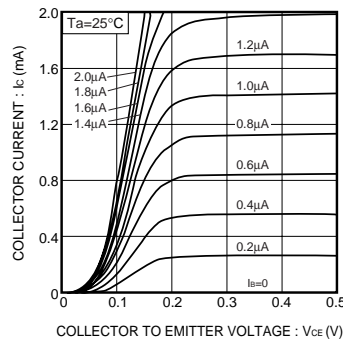


Fig.1 Grounded emitter output characteristics (I)

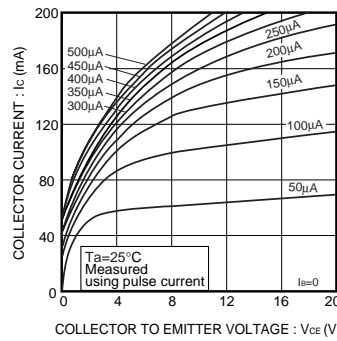


Fig.2 Grounded emitter output characteristics (II)

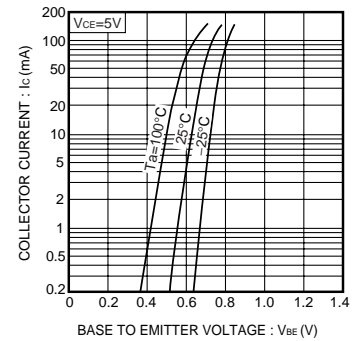


Fig.3 Grounded emitter propagation characteristics

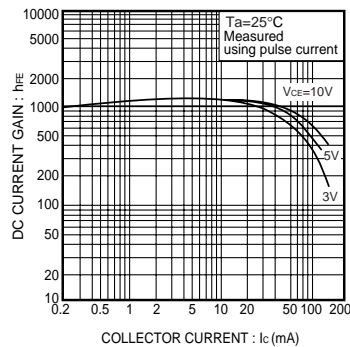


Fig.4 DC current gain vs. collector current (I)

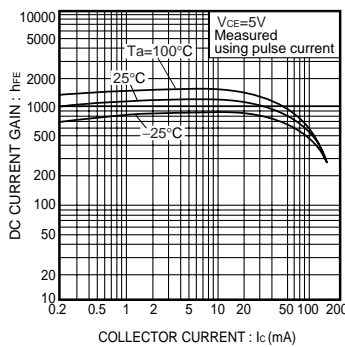


Fig.5 DC current gain vs. collector current (II)

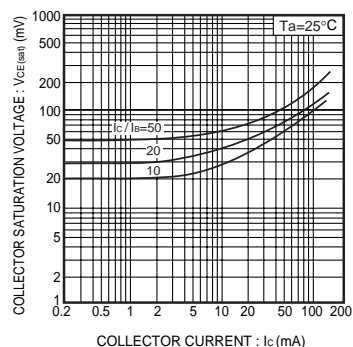


Fig.6 Collector-emitter saturation voltage vs. collector current (I)

Transistors

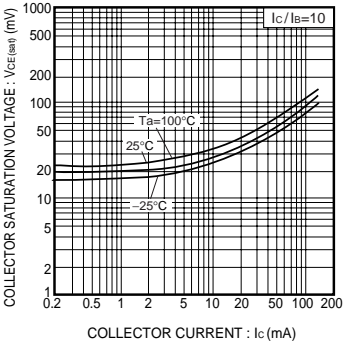


Fig.7 Collector-emitter saturation voltage vs. collector current (II)

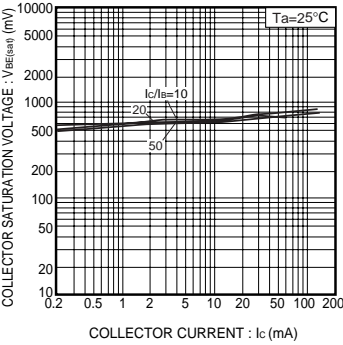


Fig.8 Base-emitter saturation voltage vs. collector current (I)

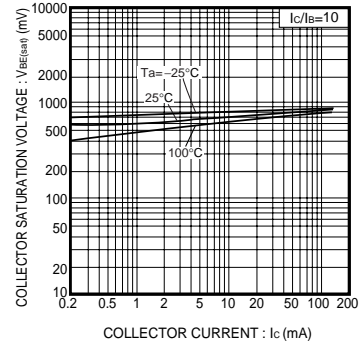


Fig.9 Base-emitter saturation voltage vs. collector current (II)

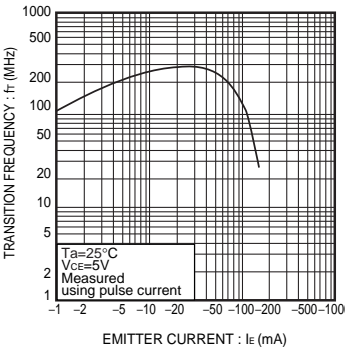


Fig.10 Gain bandwidth product vs. emitter current

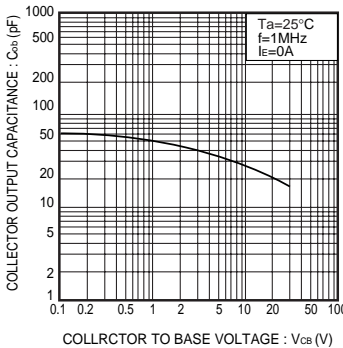


Fig.11 Collector output capacitance vs. collector-base voltage

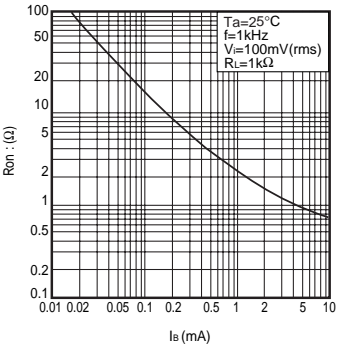


Fig.12 Output on resistance vs. base current

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