

# General purpose transistors (dual transistors)

## EMX26

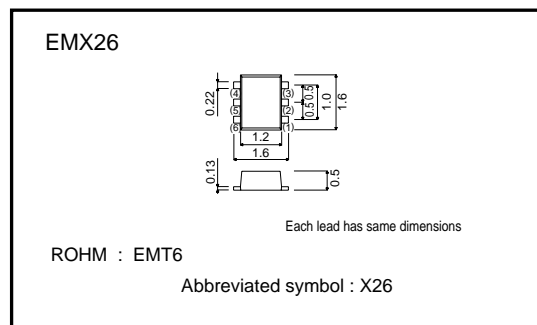
### ●Features

- 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

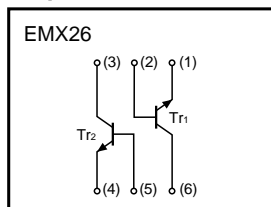
Epitaxial planar type  
NPN silicon transistor

### ●External dimensions (Unit : mm)



The following characteristics apply to both Tr<sub>1</sub> and Tr<sub>2</sub>.

### ●Equivalent circuit



### ●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V <sub>CB0</sub>	60	V
Collector-emitter voltage	V <sub>CE0</sub>	50	V
Emitter-base voltage	V <sub>EB0</sub>	12	V
Collector current	I <sub>c</sub>	0.15	A (DC)
		0.2	A (Pulse) *1
Power dissipation	P <sub>d</sub>	150 (TOTAL)	mW *2
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

\*1 Single pulse P<sub>w</sub>=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 <sub>CB0</sub>	60	–	–	V	I <sub>c</sub> =10μA
Collector-emitter breakdown voltage	BV <sub>CEO</sub>	50	–	–	V	I <sub>c</sub> =1mA
Emitter-base breakdown voltage	BV <sub>EB0</sub>	12	–	–	V	I <sub>E</sub> =10μA
Collector cutoff current	I <sub>CB0</sub>	–	–	0.3	μA	V <sub>CB</sub> =50V
Emitter cutoff current	I <sub>EB0</sub>	–	–	0.3	μA	V <sub>EB</sub> =12V
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	–	–	0.3	V	I <sub>c</sub> /I <sub>b</sub> =50mA/5mA
DC current transfer ratio	h <sub>FE</sub>	820	–	2700	–	V <sub>CE</sub> /I <sub>c</sub> =5V/1mA
Transition frequency	f <sub>T</sub>	–	250	–	MHz	V <sub>CE</sub> =5V, I <sub>E</sub> =–10mA, f=100MHz
Output capacitance	C <sub>ob</sub>	–	3.5	*	pF	V <sub>CB</sub> =5V, I <sub>E</sub> =0A, f=1MHz

\* Measured using pulse current.

●Packaging specifications

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

●Electrical characteristic curves

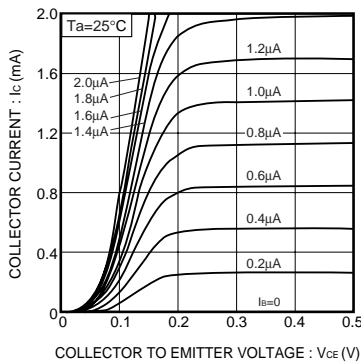


Fig.1 Grounded emitter output characteristics ( I )

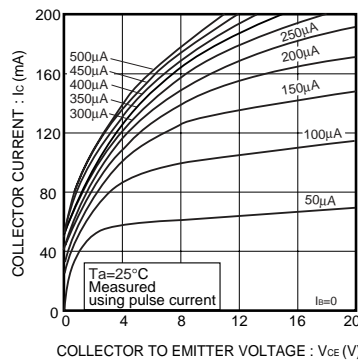


Fig.2 Grounded emitter output characteristics ( II )

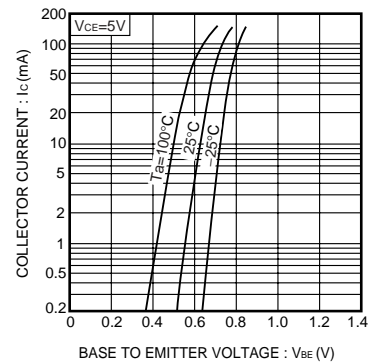


Fig.3 Grounded emitter propagation characteristics

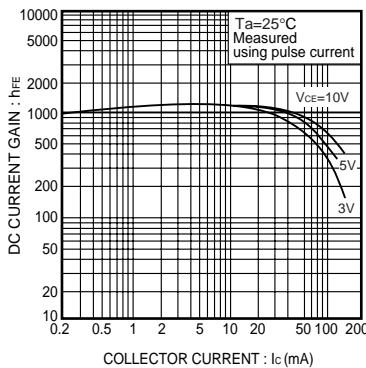


Fig.4 DC current gain vs. collector current ( I )

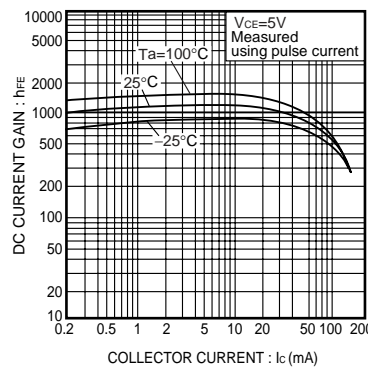


Fig.5 DC current gain vs. collector current ( II )

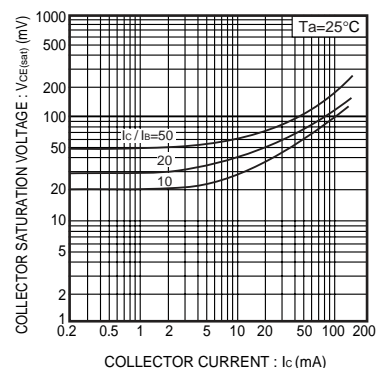


Fig.6 Collector-emitter saturation voltage vs. collector current ( I )

Transistors

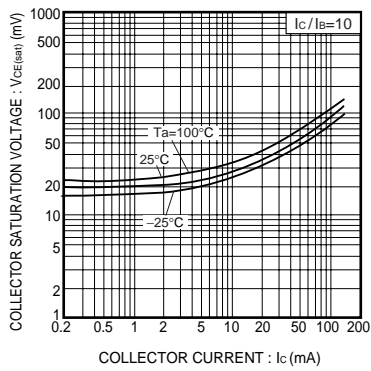


Fig.7 Collector-emitter saturation voltage vs. collector current ( II )

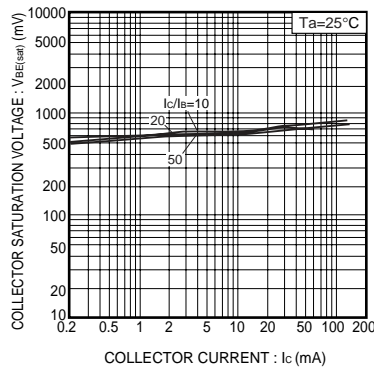


Fig.8 Base-emitter saturation voltage vs. collector current ( I )

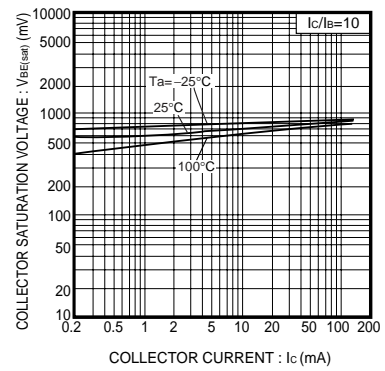


Fig.9 Base-emitter saturation voltage vs. collector current ( II )

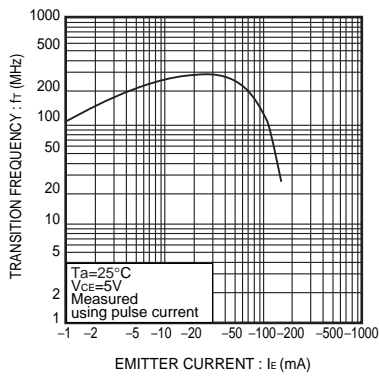


Fig.10 Gain bandwidth product vs. emitter current

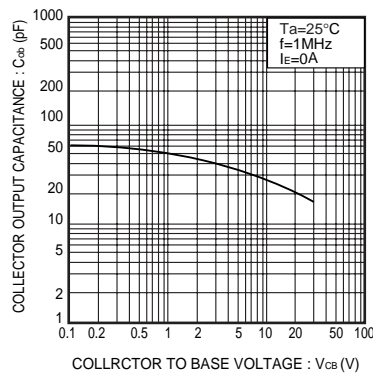


Fig.11 Collector output capacitance vs. collector-base voltage

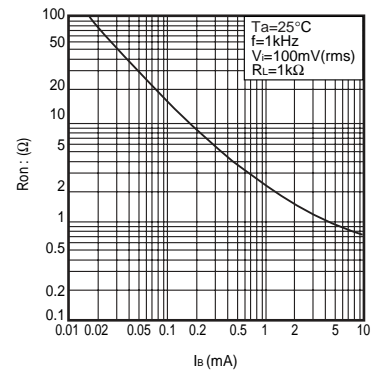


Fig.12 Output on resistance vs. base current

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