# General purpose transistors (dual transistors)

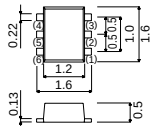
## EMX26

●**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.

●**External dimensions** (Unit : mm)

EMX26




Each lead has same dimensions

ROHM : EMT6

Abbreviated symbol : X26

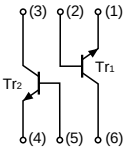
●**Structure**

Epitaxial planar type
NPN silicon transistor

The following characteristics apply to both $Tr_1$ and $Tr_2$.

●**Equivalent circuit**

EMX26




●**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 | Pd | 150 (TOTAL) | mW ∗2 |
| Junction temperature | Tj | 150 | °C |
| Storage temperature | Tstg | −55 to +150 | °C |

∗1 Single pulse Pw=100ms.
∗2 120mW per element must not be exceeded.

## ●Electrical characteristics (Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|---|---|---|---|---|---|---|
| Collector-base breakdown voltage | $BV_{CBO}$ | 60 | – | – | V | $I_C$=10μA |
| Collector-emitter breakdown voltage | $BV_{CEO}$ | 50 | – | – | V | $I_C$=1mA |
| Emitter-base breakdown voltage | $BV_{EBO}$ | 12 | – | – | V | $I_E$=10μA |
| Collector cutoff current | $I_{CBO}$ | – | – | 0.3 | μA | $V_{CB}$=50V |
| Emitter cutoff current | $I_{EBO}$ | – | – | 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 | Cob | – | 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

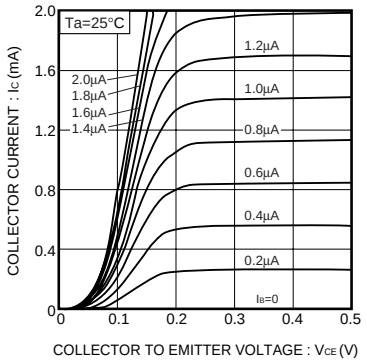



Fig.1 Grounded emitter output characteristics ( I )

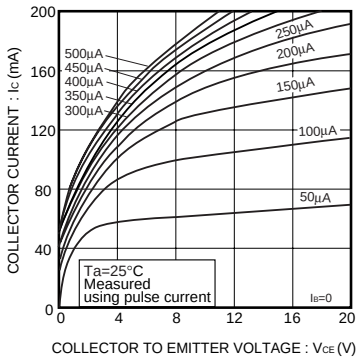



Fig.2 Grounded emitter output characteristics ( II )

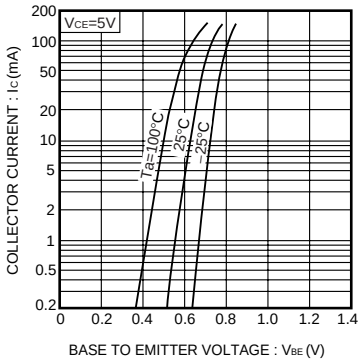



Fig.3 Grounded emitter propagation characteristics

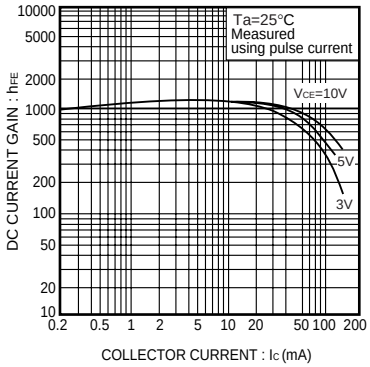



Fig.4 DC current gain vs. collector current ( I )

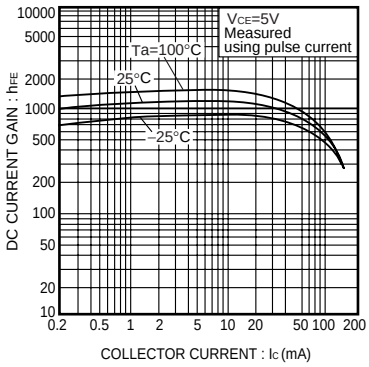



Fig.5 DC current gain vs. collector current ( II )

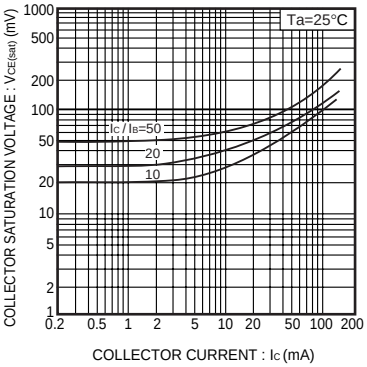



Fig.6 Collector-emitter saturation voltage vs. collector current ( I )

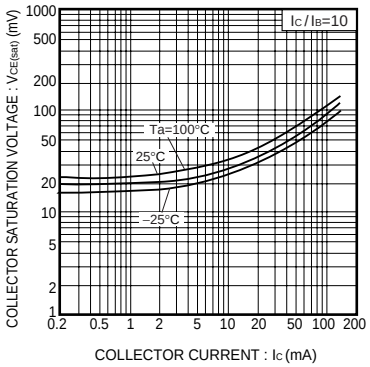



Fig.7 Collector-emitter saturation voltage vs. collector current ( II )

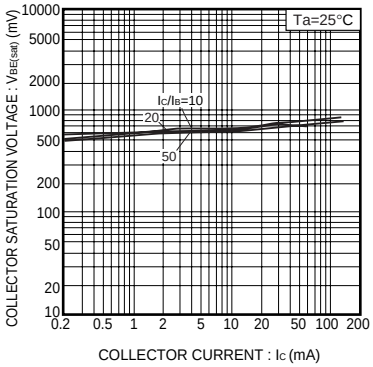



Fig.8 Base-emitter saturation voltage vs. collector current ( I )

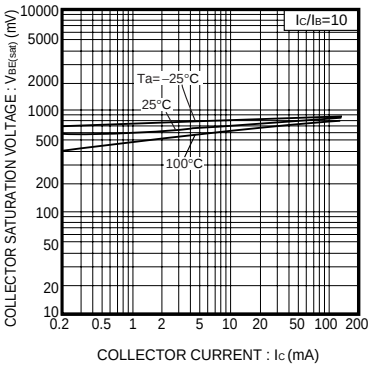



Fig.9 Base-emitter saturation voltage vs. collector current ( II )

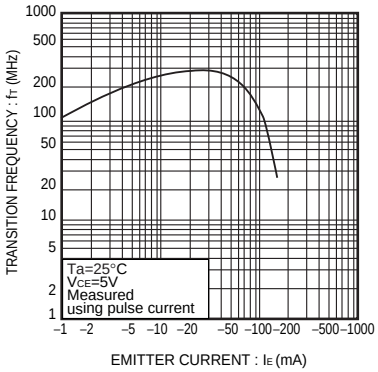



Fig.10 Gain bandwidth product vs. emitter current

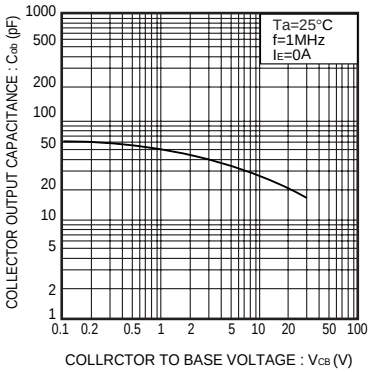



Fig.11 Collector output capacitance vs. collector-base voltage

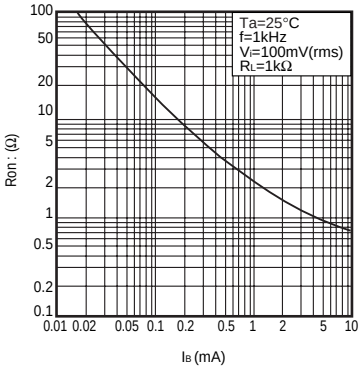



Fig.12 Output on resistance vs. base current

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