

# General purpose transistor (dual transistors)

## IMX17

### ●Features

- 1) Two 2SD1484K chips in an SMT package.
- 2) Mounting possible with SMT3 automatic mounting machine.
- 3) Transistor elements are independent, eliminating interference.
- 4) High collector current.  
 $I_c = 500\text{mA}$
- 5) Mounting cost and area can be cut in half.

### ●Structure

Epitaxial planar type  
NPN silicon transistor

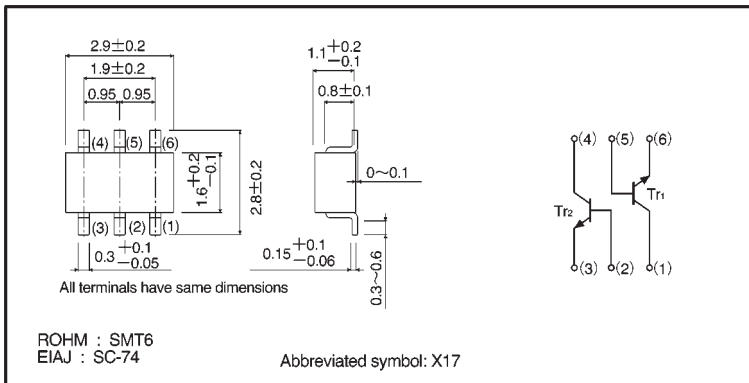
The following characteristics apply to both Tr<sub>1</sub> and Tr<sub>2</sub>.

### ●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	$V_{EBO}$	5	V
Collector current	$I_c$	500	mA
Power dissipation	$P_d$	300 (TOTAL)	mW *
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55~+150	°C

\*200 mW per element must not be exceeded.

### ●External dimensions (Units: mm)



●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	$BV_{CBO}$	60	—	—	V	$I_C=100\mu A$
Collector-emitter breakdown voltage	$BV_{CEO}$	50	—	—	V	$I_C=1mA$
Emitter-base breakdown voltage	$BV_{EBO}$	5	—	—	V	$I_E=100\mu A$
Collector cutoff current	$I_{CBO}$	—	—	0.1	$\mu A$	$V_{CB}=30V$
Emitter cutoff current	$I_{EBO}$	—	—	0.1	$\mu A$	$V_{EB}=4V$
Collector-emitter saturation voltage	$V_{CE(sat)}$	—	—	0.6	V	$I_C/I_B=500mA/50mA$
DC current transfer ratio	$h_{FE}$	120	—	390	—	$V_{CE}=3V, I_C=100mA$ *
Transition frequency	$f_T$	—	250	—	MHz	$V_{CE}=5V, I_E=-20mA, f=100MHz$
Output capacitance	$C_{ob}$	—	7	—	pF	$V_{CB}=10V, I_E=0A, f=1MHz$

\* Measured using pulse current.

●Packaging specifications

Part No.	Packaging type	Taping
	Code	T110
	Basic ordering unit (pieces)	3000
IMX17		

●Electrical characteristic curves

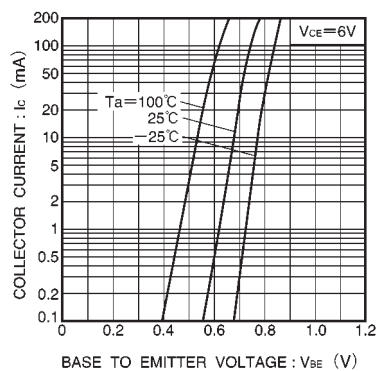


Fig.1 Grounded emitter propagation characteristics

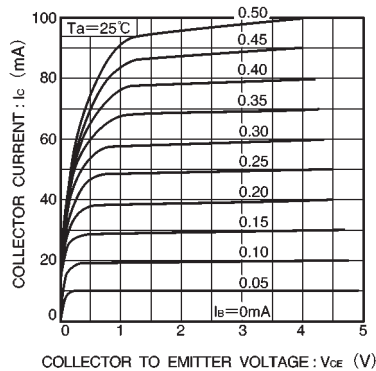


Fig.2 Grounded emitter output characteristics

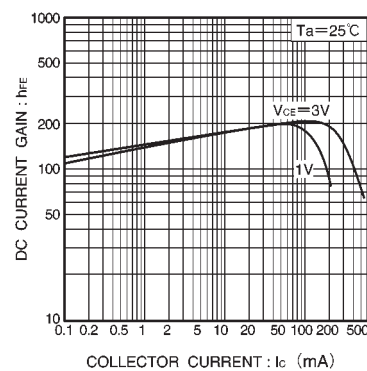


Fig.3 DC current gain vs. collector current (I)

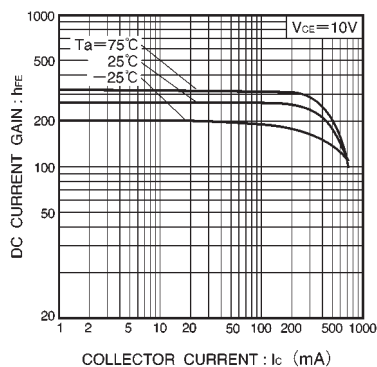


Fig.4 DC current gain vs. collector current (I)

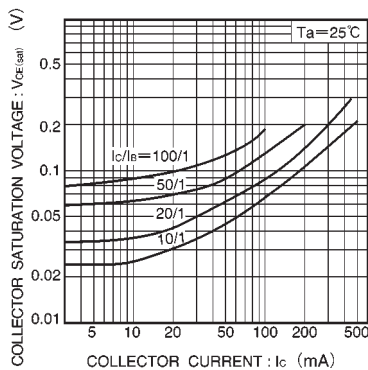


Fig.5 Collector-emitter saturation voltage vs. collector current

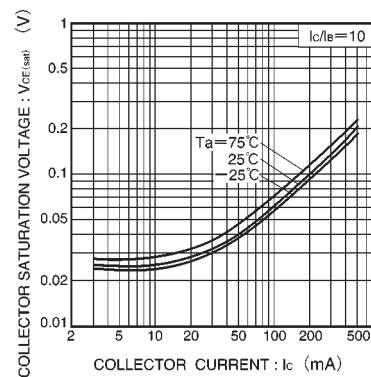


Fig.6 Collector-emitter saturation voltage vs. collector current

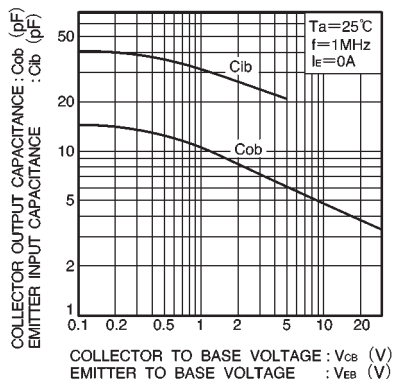


Fig.7 Input/output capacitance vs. voltage

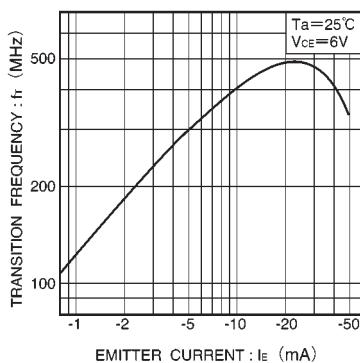


Fig.8 Gain bandwidth product vs. emitter current