

## Transistors

# General purpose transistor (isolated dual transistors)

## IMT17

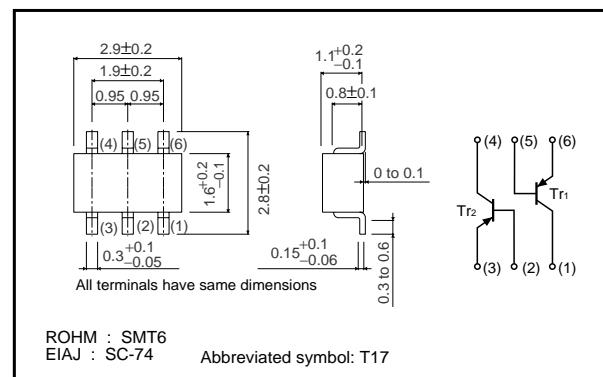
### ● Applications

General purpose small signal amplifier

### ● Features

- 1) Two 2SA1036K chips in an SMT package.
- 2) Same size as SMT3 package, so same mounting machine can be used for both.
- 3) Transistor elements are independent, eliminating interference.
- 4) High collector current.  $I_c = -500\text{mA}$
- 5) Mounting cost, and area, are reduced by one half.

### ● External dimensions (Unit : mm)



### ● Structure

Epitaxial planar type  
PNP silicon transistor

The following characteristics apply to both  $\text{Tr}_1$  and  $\text{Tr}_2$ .

### ● Packaging specifications

	Packaging type	Taping
	Code	T110
Part No.	Basic ordering unit (pieces)	3000
IMT17		○

### ● Absolute maximum ratings ( $T_a=25^\circ\text{C}$ )

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	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

\* 200mW per element must not be exceeded.

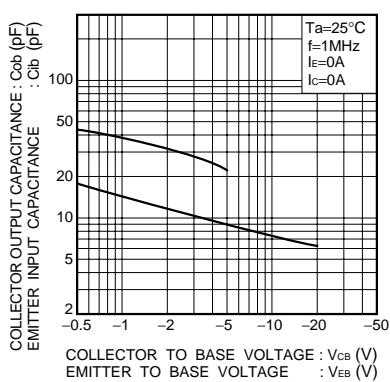
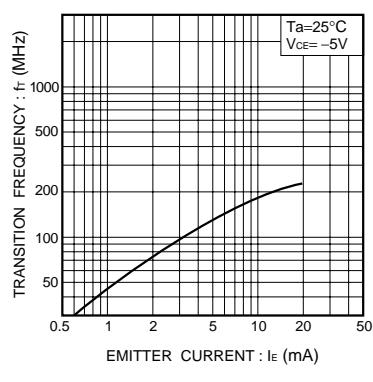
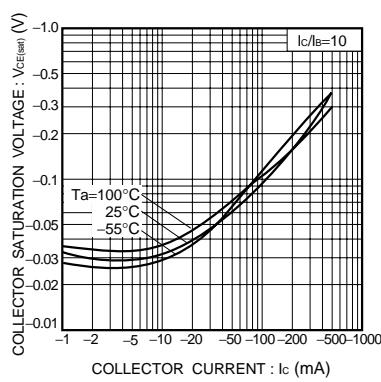
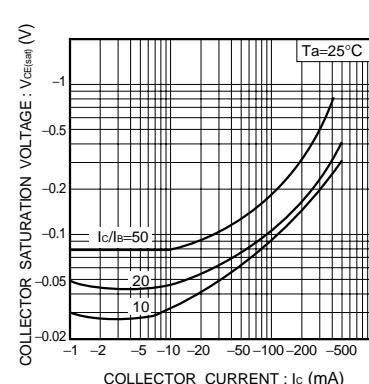
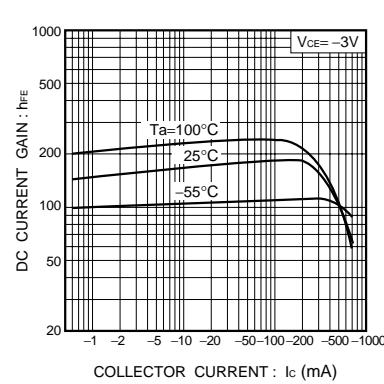
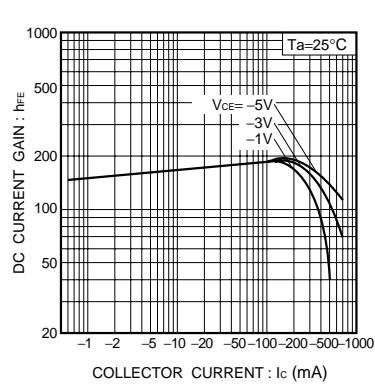
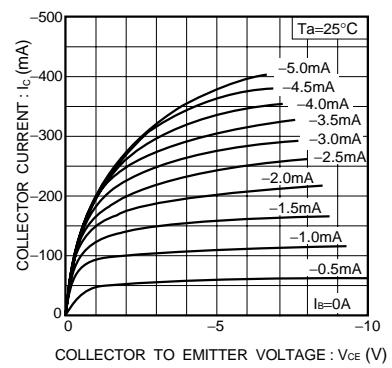
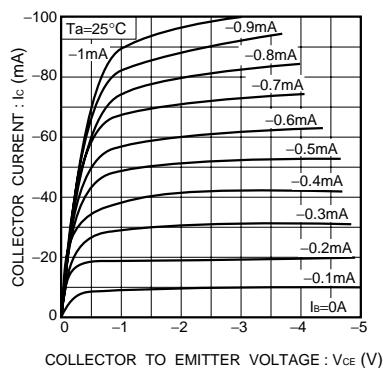
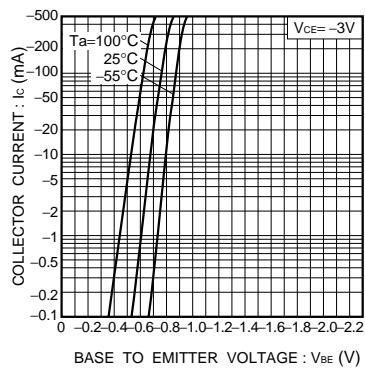
### ● Electrical characteristics( $T_a=25^\circ\text{C}$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	$BV_{CBO}$	-60	-	-	V	$I_c = -100\mu\text{A}$
Collector-emitter breakdown voltage	$BV_{CEO}$	-50	-	-	V	$I_c = -1\text{mA}$
Emitter-base breakdown voltage	$BV_{EBO}$	-5	-	-	V	$I_e = -100\mu\text{A}$
Collector cutoff current	$I_{CBO}$	-	-	-0.1	$\mu\text{A}$	$V = -30\text{V}$
Emitter cutoff current	$I_{EBO}$	-	-	-0.1	$\mu\text{A}$	$V = -4\text{V}$
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	-	-	-0.6	V	$I_c/I_B = -500\text{mA}/-50\text{mA}$
DC current transfer ratio	$h_{FE}$	120	-	390	-	$V_{CE} = -3\text{V}, I_c = -100\text{mA}$
Transition frequency	$f_T$	-	200	-	MHz	$V_{CE} = -5\text{V}, I_e = 20\text{mA}, f = 100\text{MHz}$
Output capacitance	$C_{OB}$	-	7	-	pF	$V_{CB} = -10\text{V}, I_e = 0\text{A}, f = 1\text{MHz}$

\* Measured using pulse current.

## Transistors

## ● Electrical characteristic curves



## Appendix

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