

<b>SANYO</b>	No.3973	2SA1814
		PNP Epitaxial Planar Silicon Transistor Low-Frequency General-Purpose Amp, Driver, Muting Circuit Applications

**Features**

- Very small-sized package permitting 2SA1814-applied sets to be made smaller and slimmer.
- Adoption of FBET process.
- High DC current gain ( $h_{FE} = 500$  to  $1200$ ).
- Low collector-to-emitter saturation voltage ( $V_{CE(sat)} \leq 0.3V$ ).
- High  $V_{EBO}$  ( $V_{EBO} \geq 15V$ ).

**Absolute Maximum Ratings at  $T_a = 25^\circ C$**

Collector-to-Base Voltage	$V_{CBO}$		- 30	V	unit
Collector-to-Emitter Voltage	$V_{CEO}$		- 25	V	
Emitter-to-Base Voltage	$V_{EBO}$		- 15	V	
Collector Current	$I_C$		- 150	mA	
Collector Current (Pulse)	$I_{CP}$		- 300	mA	
Base Current	$I_B$		- 30	mA	
Collector Dissipation	$P_C$	Mounted on board	250	mW	
Junction Temperature	$T_j$		150	$^\circ C$	
Storage Temperature	$T_{stg}$		- 55 to + 150	$^\circ C$	

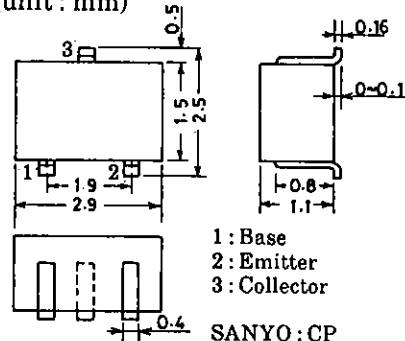
**Electrical Characteristics at  $T_a = 25^\circ C$**

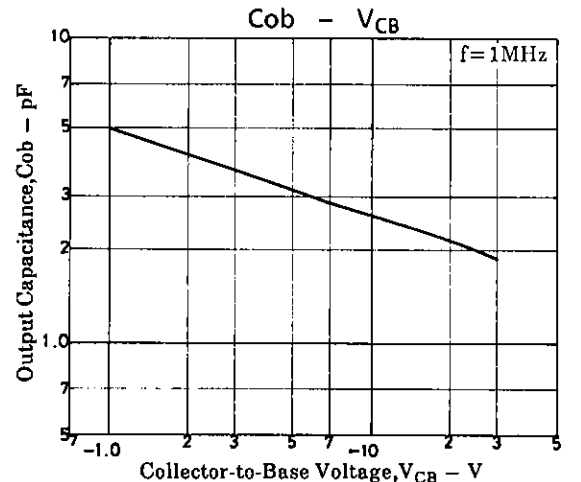
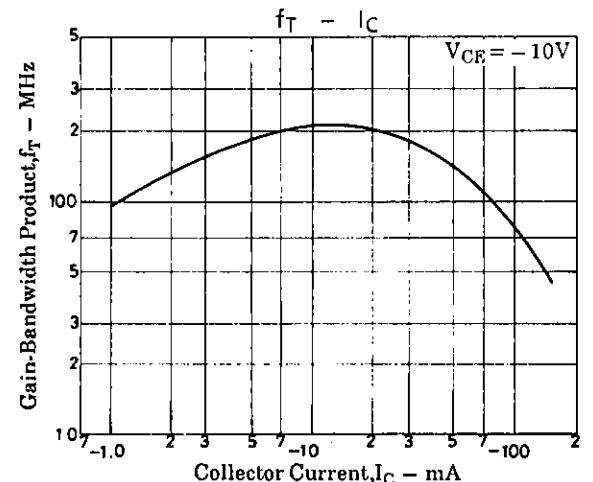
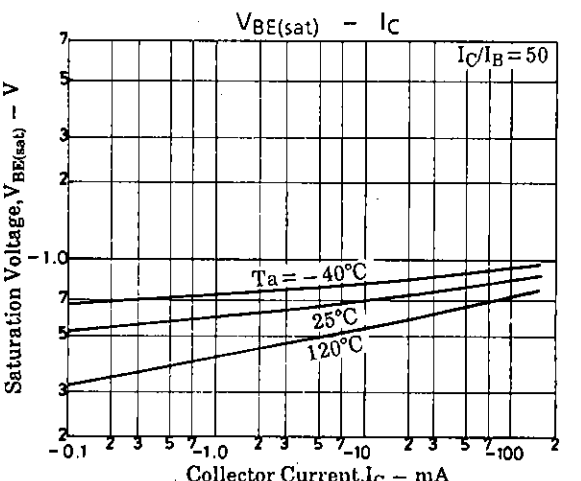
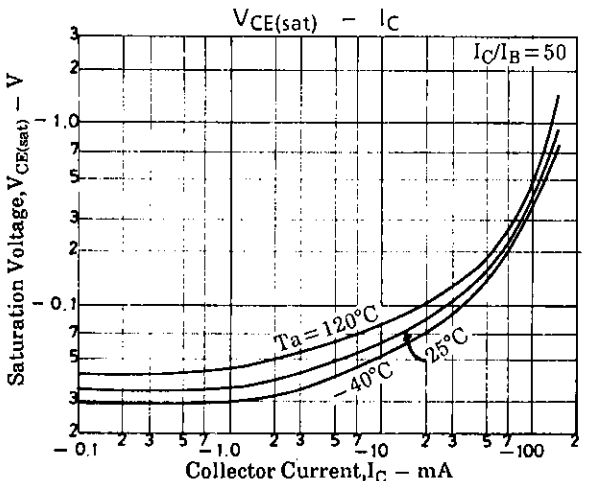
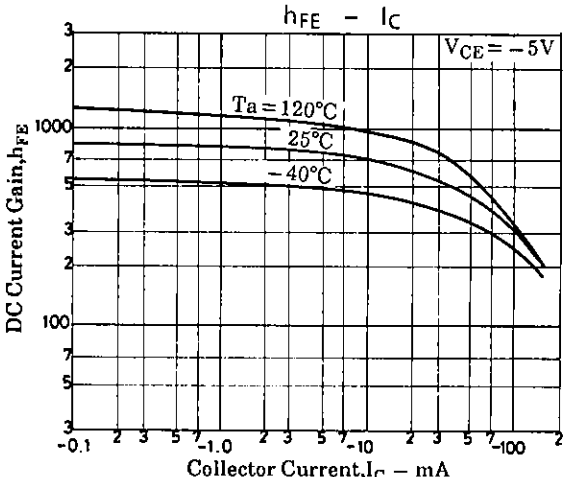
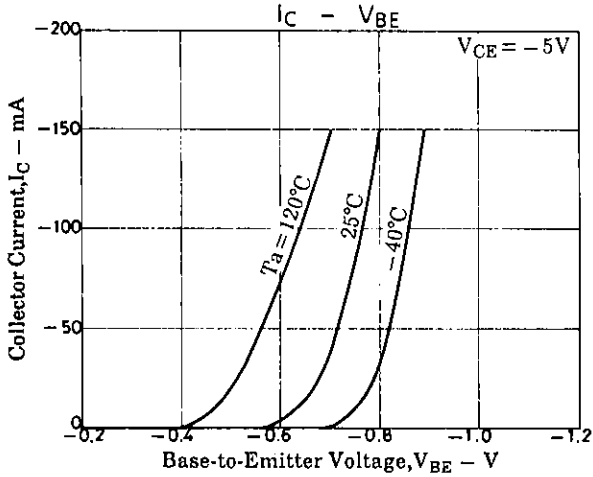
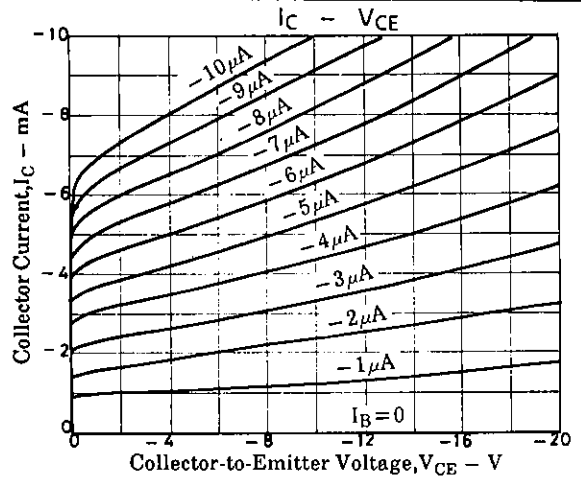
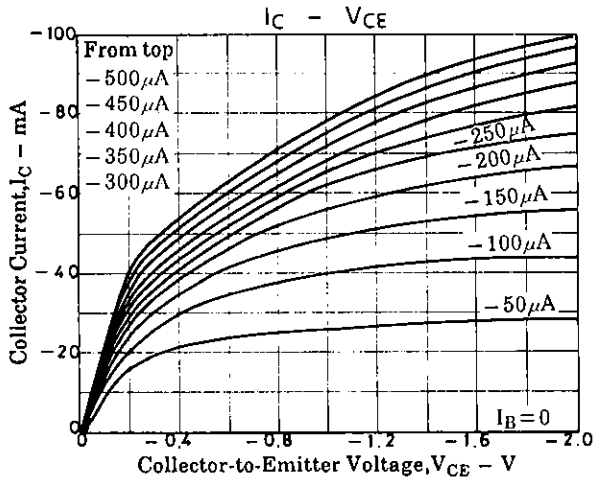
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = -20V, I_E = 0$			- 0.1	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = -10V, I_C = 0$			- 0.1	$\mu A$
DC Current Gain	$h_{FE}$	$V_{CE} = -5V, I_C = -1mA$	500	800	1200	
Gain-Bandwidth Product	$f_T$	$V_{CE} = -10V, I_C = -10mA$		210		MHz
Output Capacitance	$C_{ob}$	$V_{CB} = -10V, f = 1MHz$		2.6		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = -50mA, I_B = -1mA$	- 0.15		- 0.3	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = -50mA, I_B = -1mA$	- 0.78		- 1.1	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	- 30			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1mA, R_{BE} = \infty$	- 25			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	- 15			V

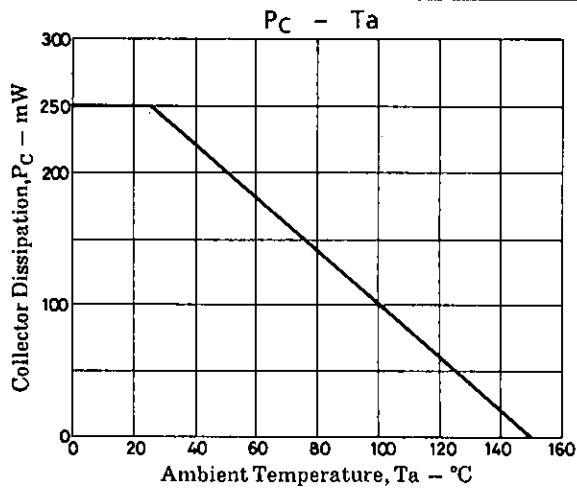
Marking : KS

**Package Dimensions 2018B**

(unit : mm)







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