

**SANYO**

No.4668

**2SA1723**

PNP Epitaxial Planar Silicon Transistor  
 High-Frequency Amp, Medium-Power  
 Amp Applications

**Applications**

- Wideband amplifiers.
- High-frequency drivers.

**Features**

- High  $f_T$  ( $f_T = 1.5\text{GHz}$  typ).
- High current ( $I_C = 300\text{mA}$ ).
- Adoption of FBET process.

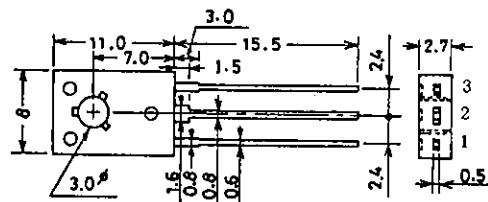
**Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$** 

			unit
Collector-to-Base Voltage	$V_{CB0}$	-30	V
Collector-to-Emitter Voltage	$V_{CEO}$	-20	V
Emitter-to-Base Voltage	$V_{EBO}$	-3	V
Collector Current	$I_C$	-300	mA
Collector Current(Pulse)	$I_{CP}$	-600	mA
Collector Dissipation	$P_C$	1.2	W
		5	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

$T_c = 25^\circ\text{C}$

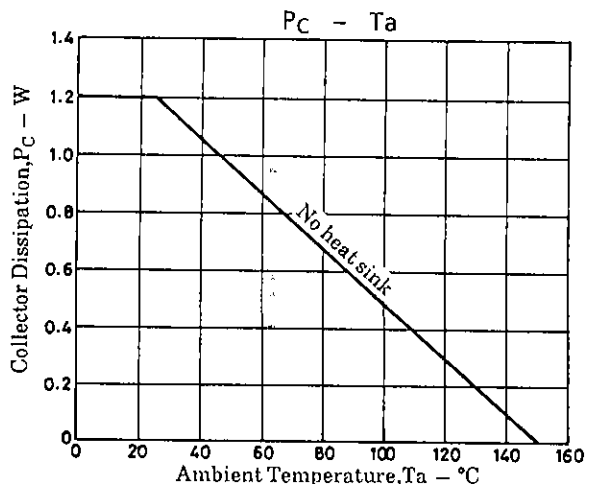
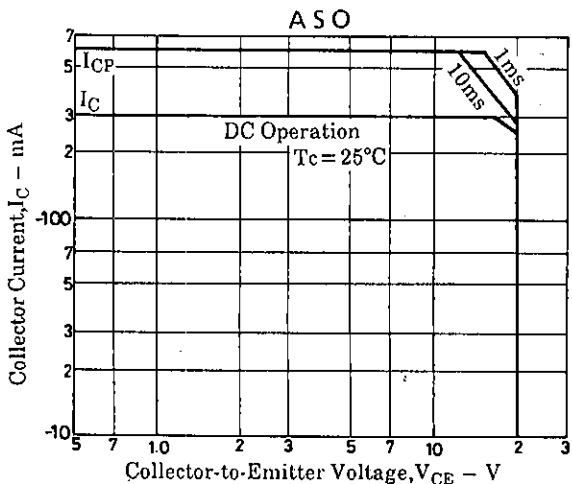
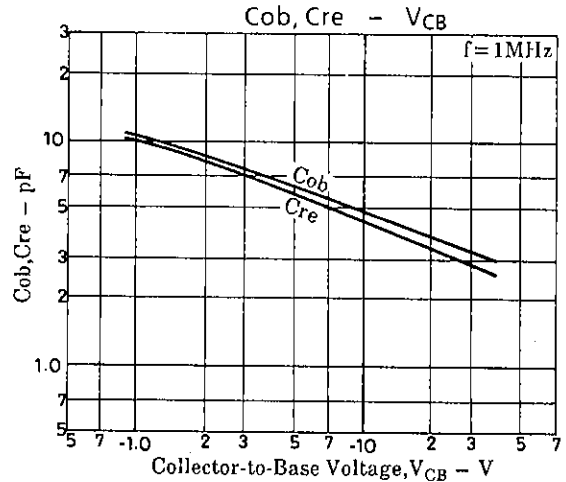
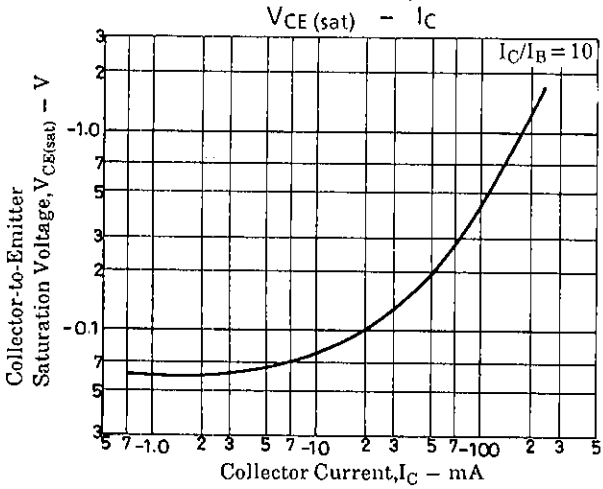
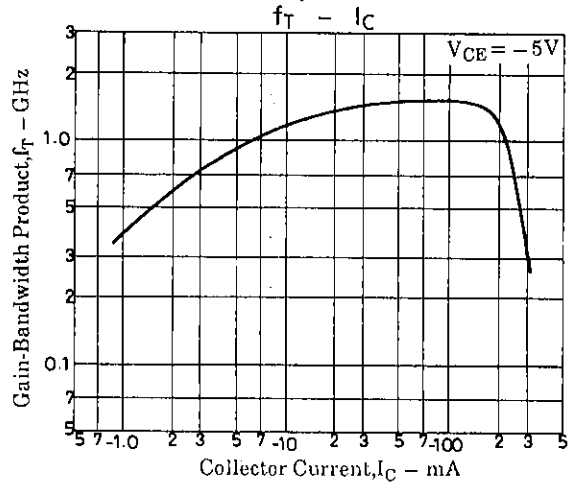
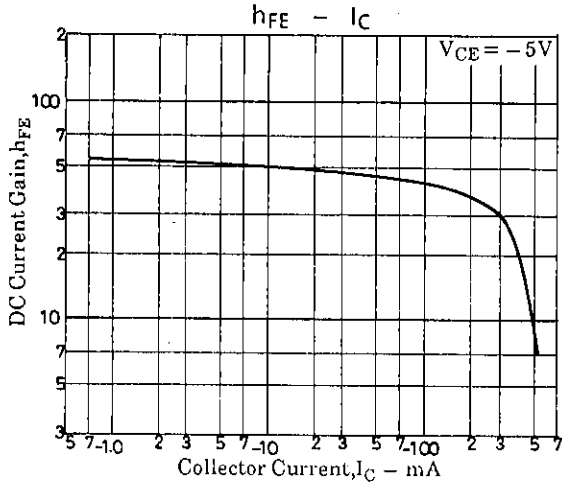
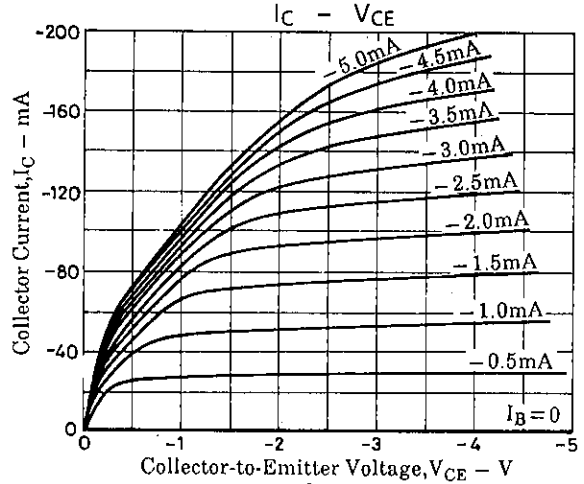
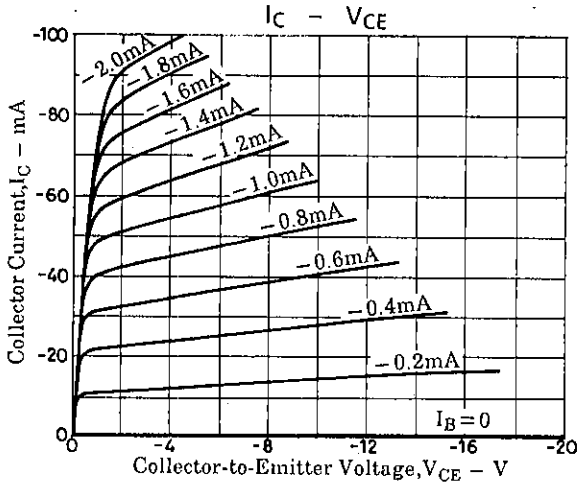
**Electrical Characteristics at  $T_a = 25^\circ\text{C}$** 

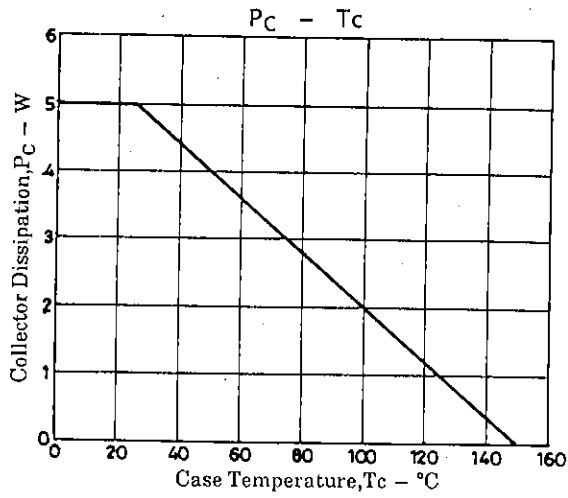
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = -20\text{V}, I_E = 0$			-0.1	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = -2\text{V}, I_C = 0$			-1.0	$\mu\text{A}$
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -5\text{V}, I_C = -50\text{mA}$	15		100	
	$h_{FE(2)}$	$V_{CE} = -5\text{V}, I_C = -300\text{mA}$	5			
Gain-Bandwidth Product	$f_T$	$V_{CE} = -5\text{V}, I_C = -100\text{mA}$		1.5		GHz
Output Capacitance	$C_{ob}$	$V_{CB} = -10\text{V}, f = 1\text{MHz}$		5.8		pF
Reverse Transfer Capacitance	$C_{re}$	$V_{CB} = -10\text{V}, f = 1\text{MHz}$		5.0		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = -100\text{mA}, I_B = -10\text{mA}$	-0.4	-1.0		V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = -100\text{mA}, I_B = -10\text{mA}$	-0.9	-1.2		V

**Package Dimensions 2009B**  
(unit: mm)

JEDEC: TO-126

1: Emitter  
 2: Collector  
 3: Base





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