

<b>SANYO</b>	No.5183	<b>2SA1968</b>
		NPN Triple Diffused Planar Silicon Transistor <b>High-Voltage Amp, High-Voltage Switching Applications</b>

**Features**

- High breakdown voltage ( $V_{CE0} \text{ min} = -900\text{V}$ ).
- Small Cob (Cob typ = 2.2pF).
- High reliability (Adoption of HVP process).
- Package of full isolation type.

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

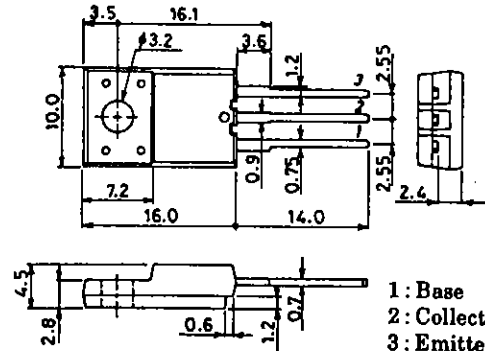
			unit
Collector-to-Base Voltage	$V_{CBO}$	-900	V
Collector-to-Emitter Voltage	$V_{CEO}$	-900	V
Emitter-to-Base Voltage	$V_{EBO}$	-7	V
Collector Current	$I_C$	-10	mA
Collector Current (Pulse)	$I_{CP}$	-30	mA
Collector Dissipation	$P_C$	2	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

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

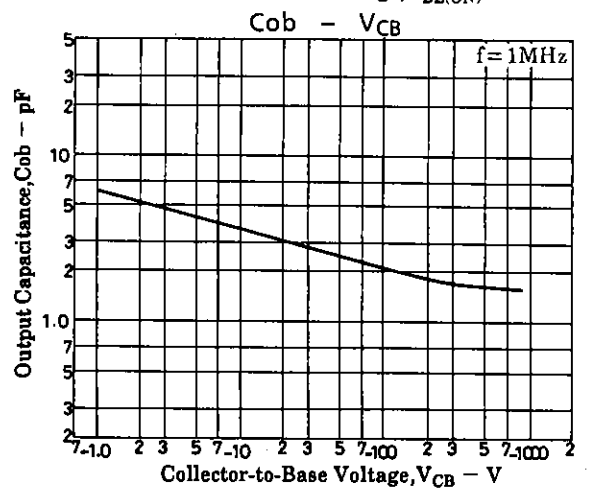
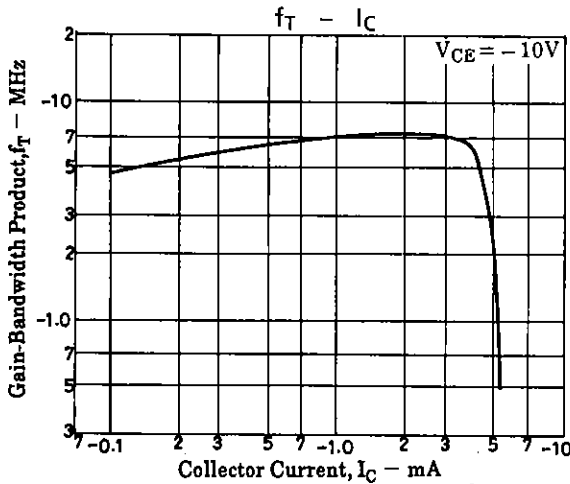
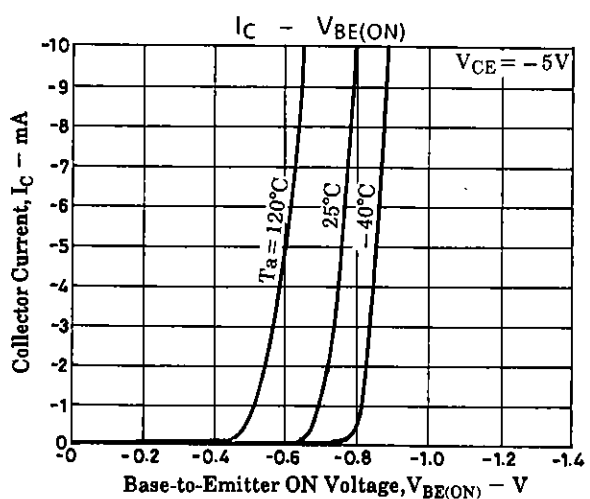
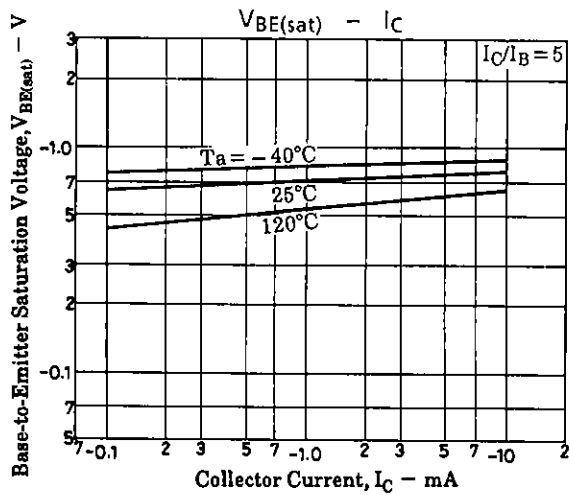
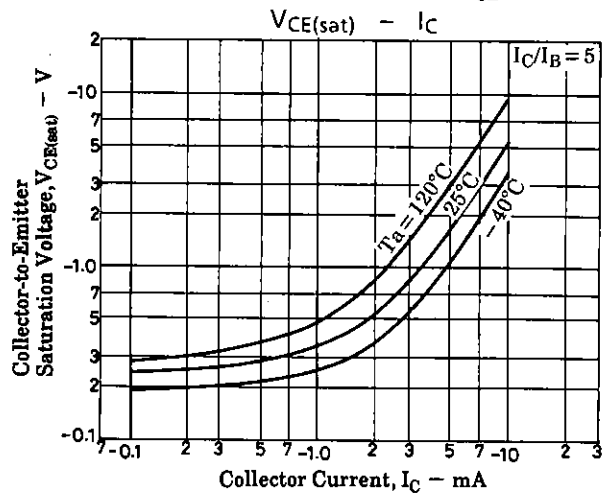
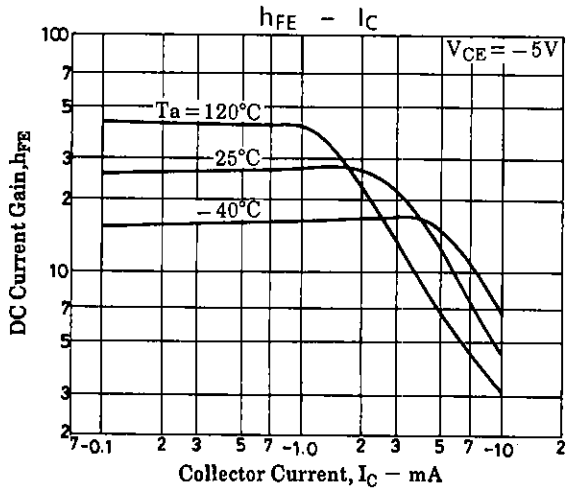
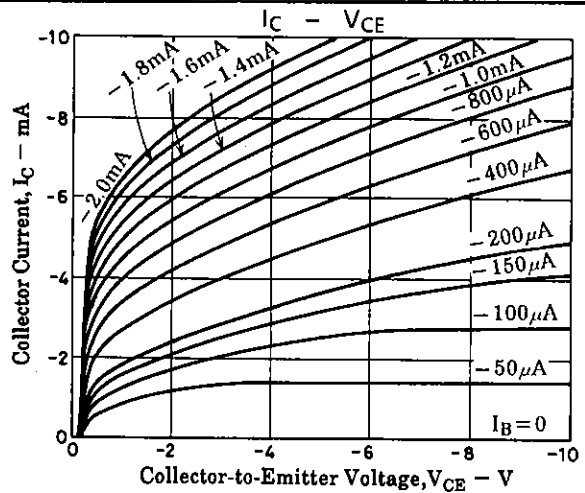
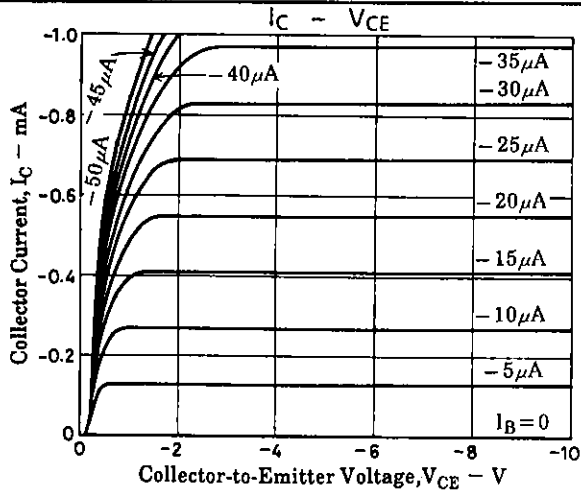
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = -900\text{V}, I_E = 0$			-1	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = -5\text{V}, I_C = 0$			-1	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE} = -5\text{V}, I_C = -1\text{mA}$	20		50	
Gain-Bandwidth Product	$f_T$	$V_{CE} = -10\text{V}, I_C = -1\text{mA}$		6		MHz
Output Capacitance	Cob	$V_{CB} = -100\text{V}, f = 1\text{MHz}$		2.2		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = -500\mu\text{A}, I_B = -100\mu\text{A}$			-1	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = -500\mu\text{A}, I_B = -100\mu\text{A}$			-1.5	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-900			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, R_{BE} = \infty$	-900			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}, I_C = 0$	-7			V

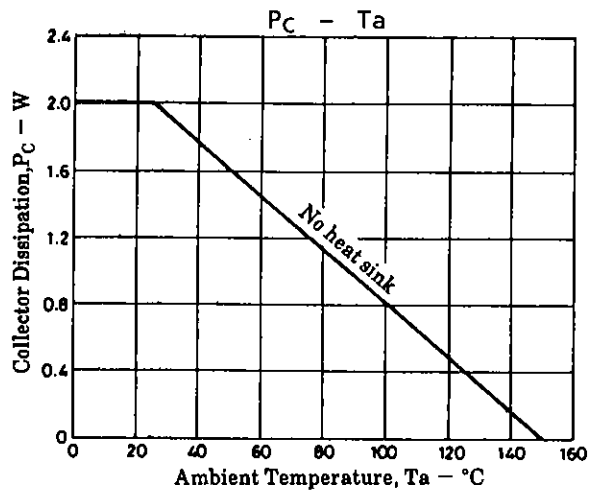
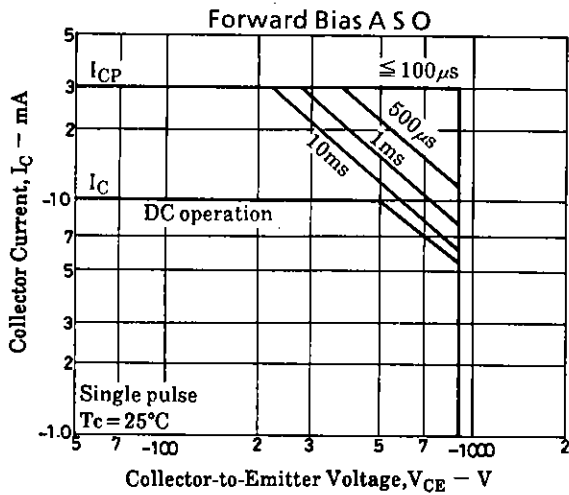
**Package Dimensions 2079B**

(unit: mm)



SANYO: TO-220FI(LS)





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