

**2SA1967**

High-Voltage Amplifier, High-Voltage Switching Applications

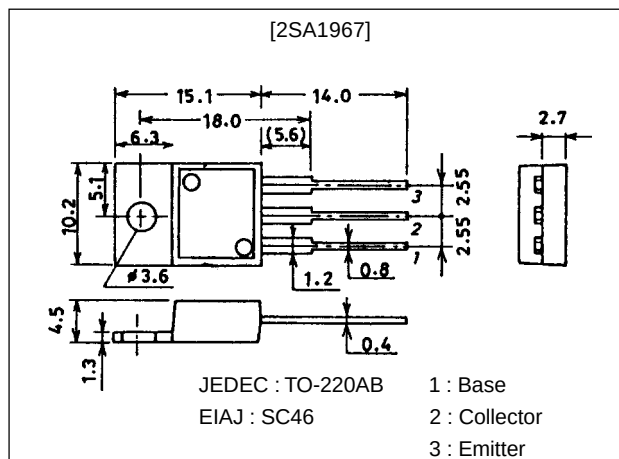
Features

- High breakdown voltage (V_{CEO} min= $-900V$).
- Small C_{ob} (C_{ob} typ= $2.2pF$).
- High reliability (Adoption of HVP process).

Package Dimensions

unit:mm

2010C



Specifications

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

Parameter	Symbol	Conditions	Ratings	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		1.75	W
Junction Temperature	T_j		150	$^\circ C$
Storage Temperature	T_{stg}		-55 to +150	$^\circ C$

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

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

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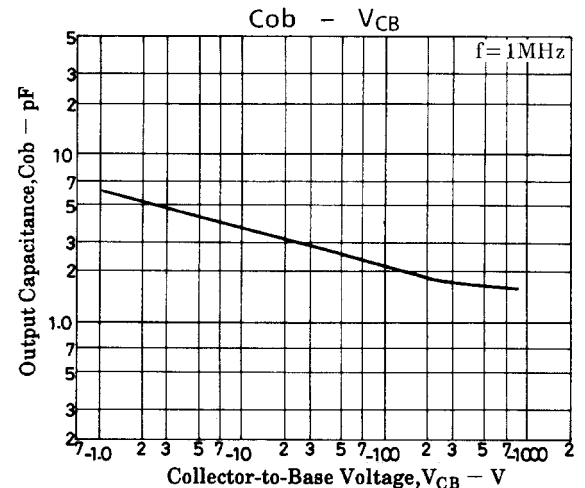
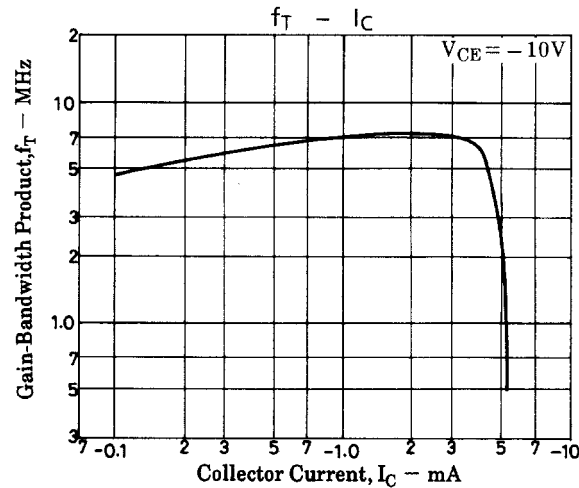
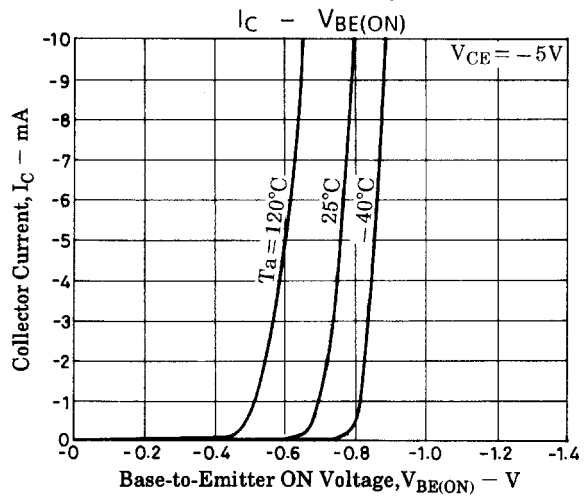
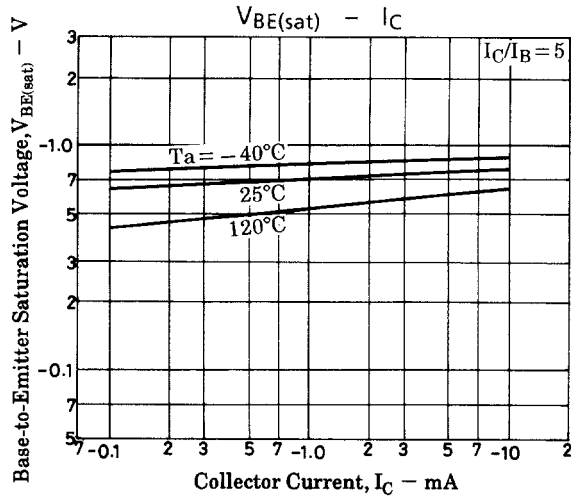
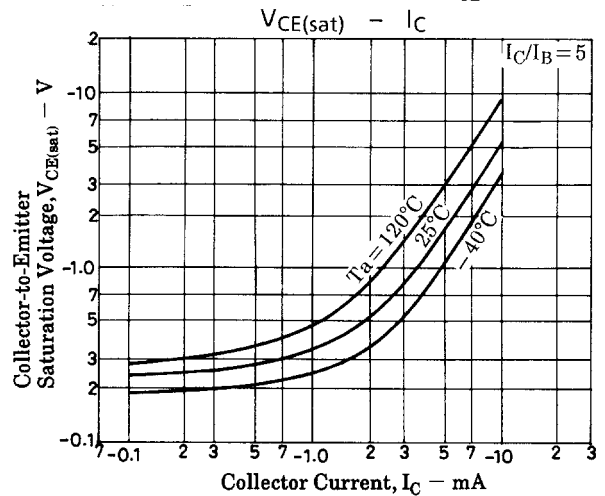
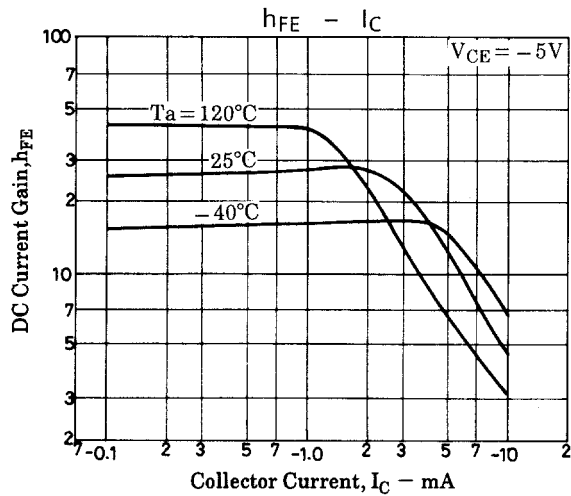
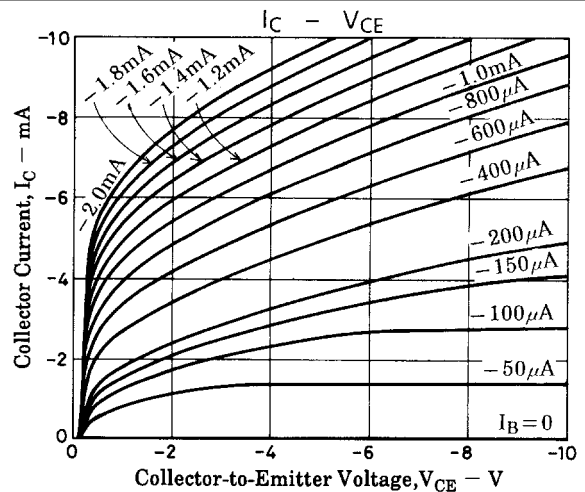
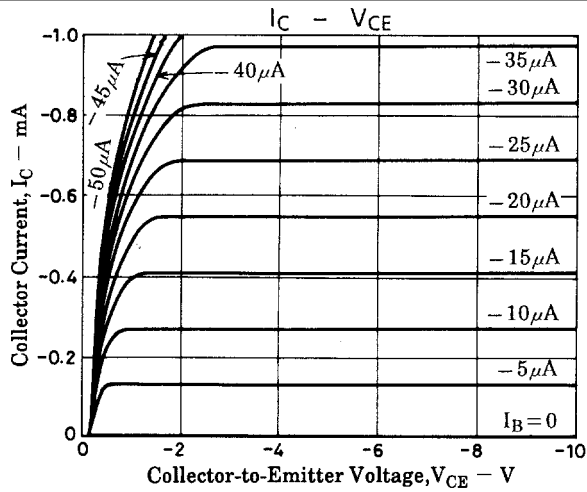
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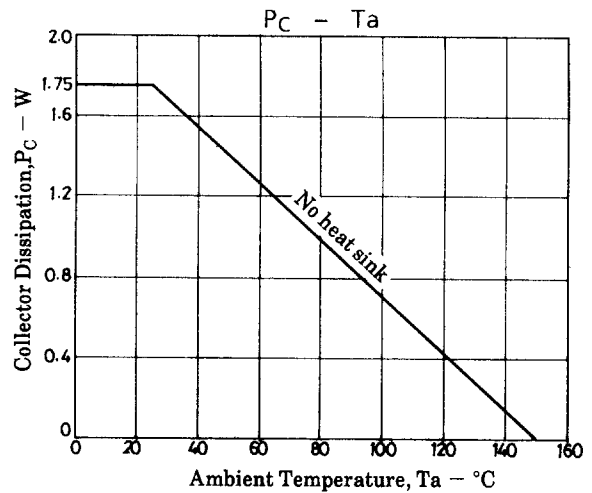
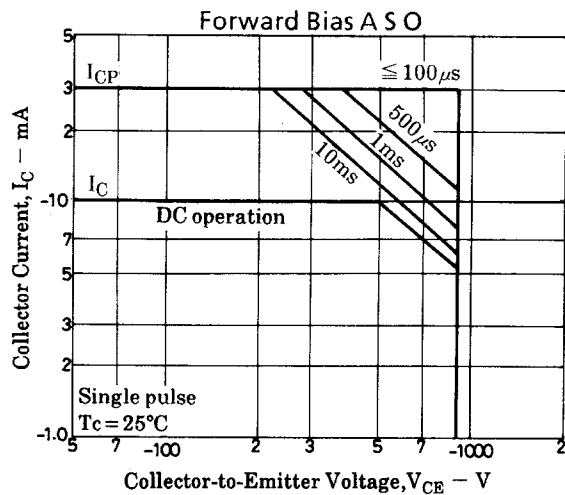
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