

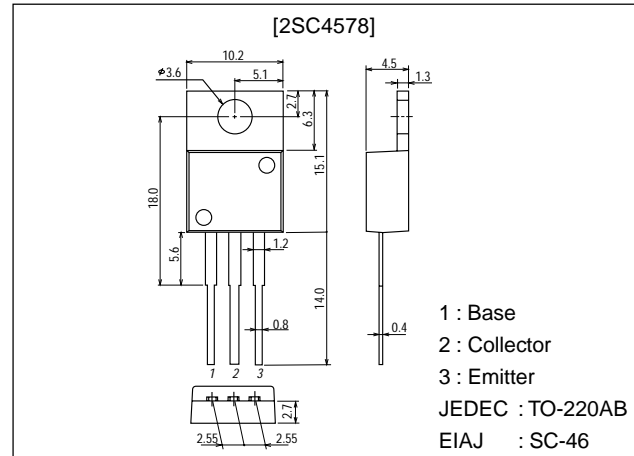
**2SC4578****900V/50mA Switching Applications****Features**

- High breakdown voltage.
- Small Cob.
- Wide ASO.
- High reliability (Adoption of HVP process).

Package Dimensions

unit:mm

2010C

**Specifications****Absolute Maximum Ratings at Ta = 25°C**

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V_{CB0}		1700	V
Collector-to-Emitter Voltage	V_{CE0}		900	V
Emitter-to-Base Voltage	V_{EBO}		5	V
Collector Current	I_C		50	mA
Collector Current (Pulse)	I_{CP}		150	mA
Collector Dissipation	P_C		1.75	W
Junction Temperature	T_J		150	°C
Storage Temperature	T_{stg}		-55 to +150	°C

Electrical Characteristics at Ta = 25°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}	$V_{EB}=4V, I_C=0$			1	μA
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=2mA$	20	50	120	
Gain-Bandwidth Product	f_T	$V_{CE}=10V, I_C=2mA$		6		MHz
Output Capacitance	Cob	$V_{CB}=100V, f=1MHz$		2		pF
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=5mA, I_B=1mA$			5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=5mA, I_B=1mA$			2	V

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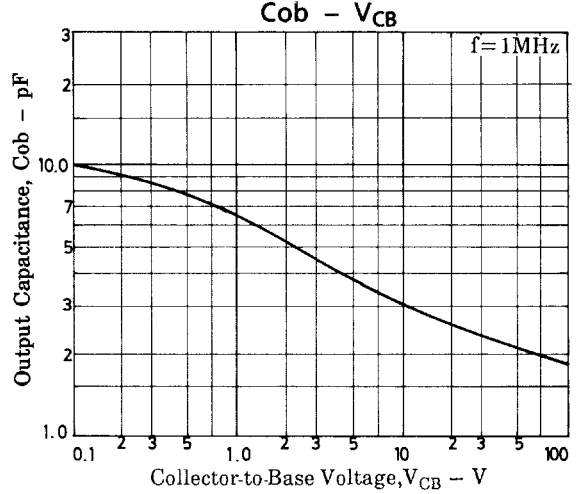
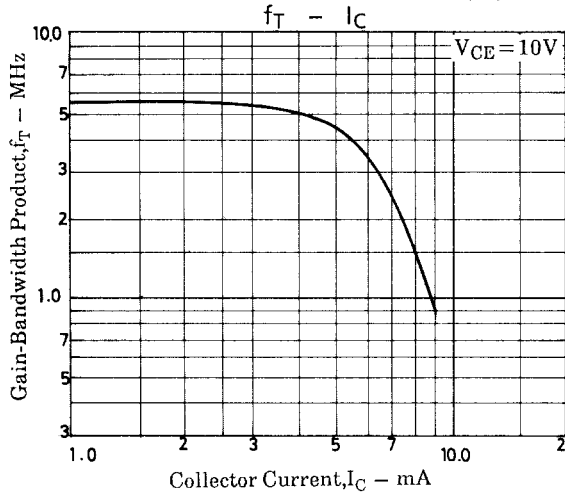
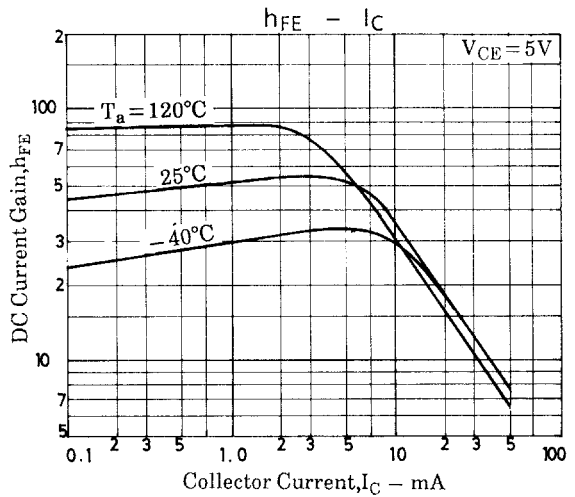
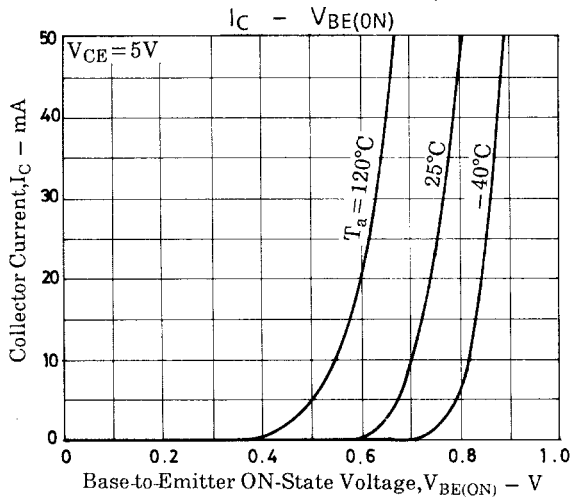
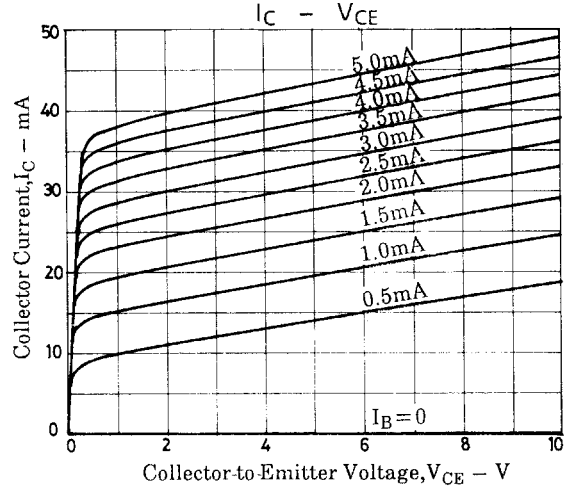
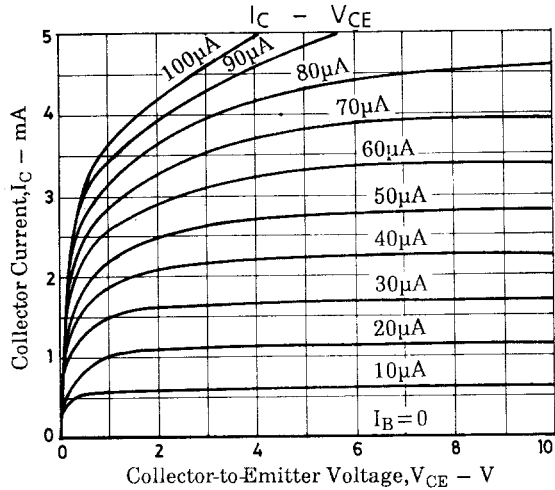
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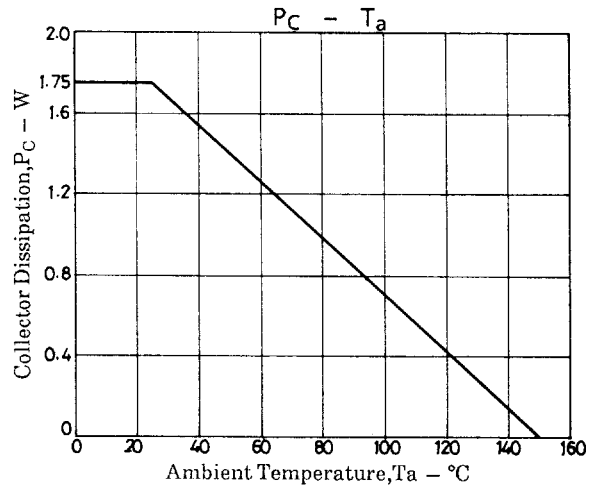
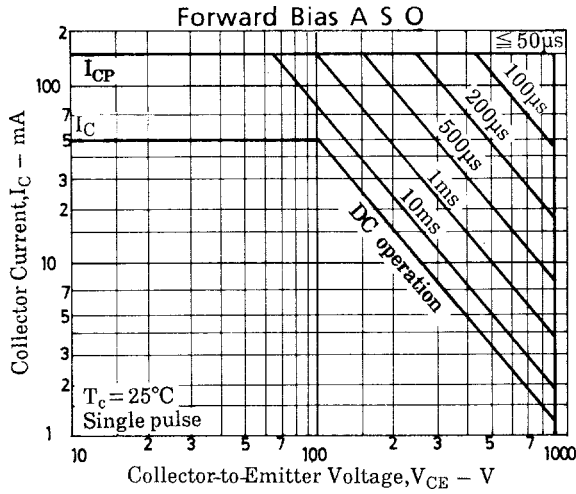
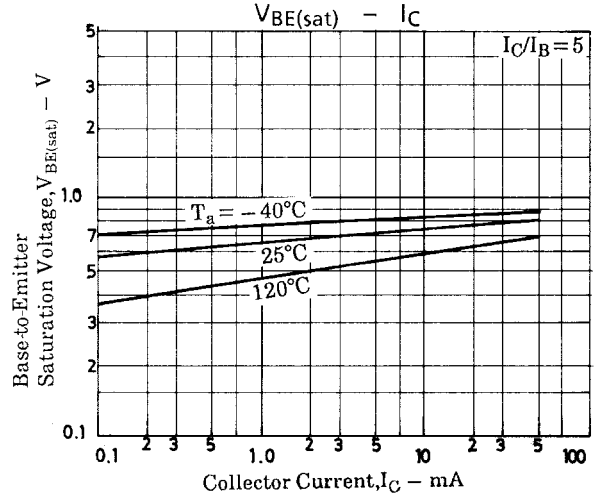
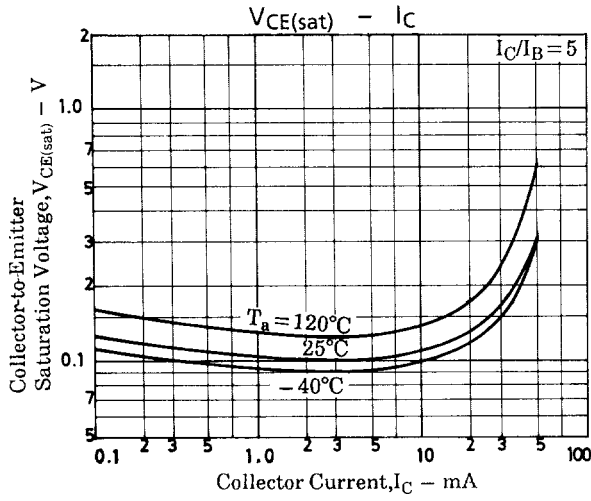
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2SC4578

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector-to-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	1700			V
Collector-to-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	900			V
Emitter-to-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	5			V





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