



2SA1968LS

High-Voltage Amplifier, High-Voltage Switching Applications

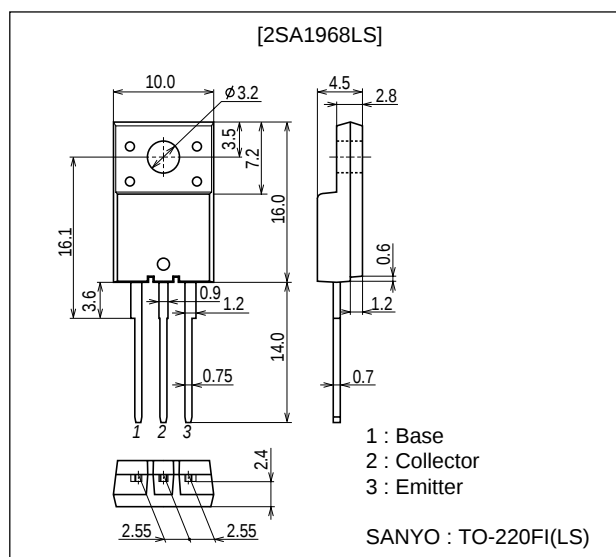
Features

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

Package Dimensions

unit : mm

2079D



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		2	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

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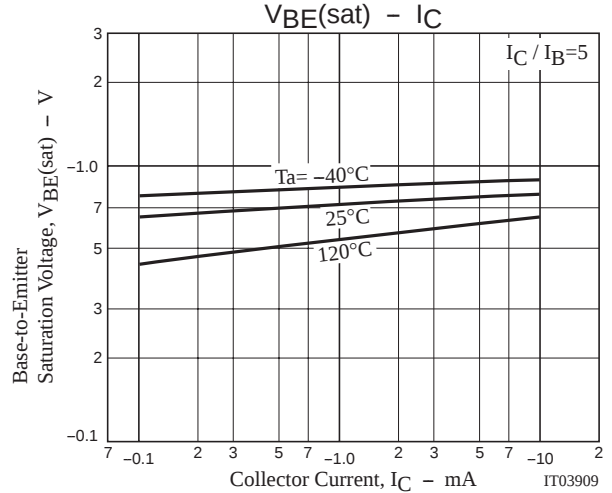
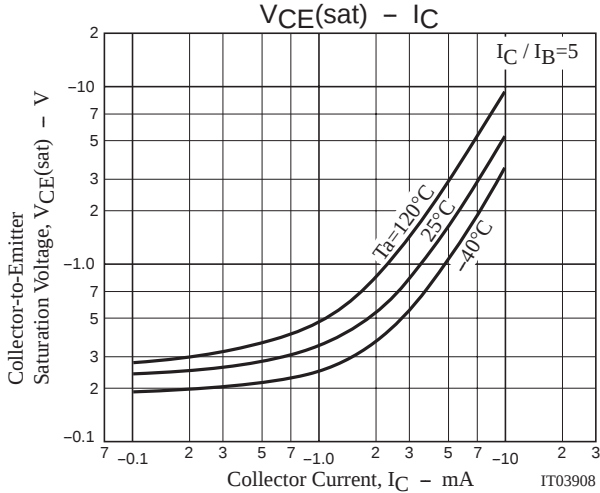
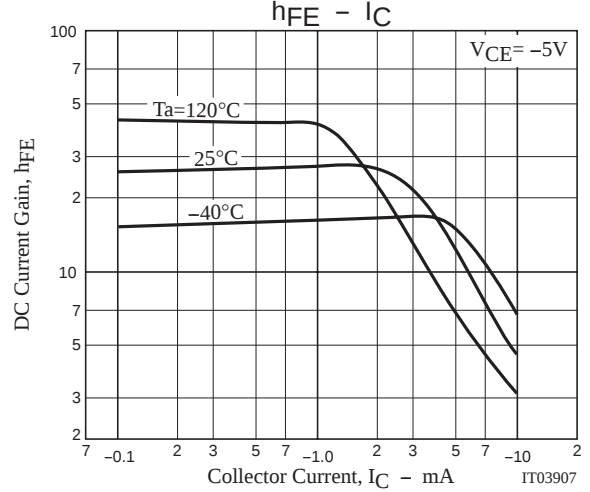
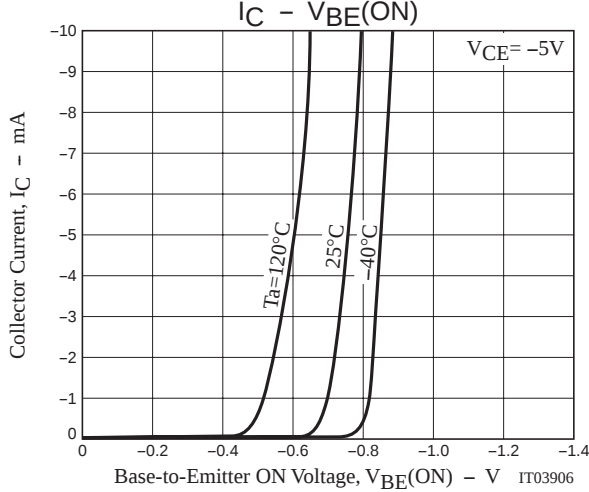
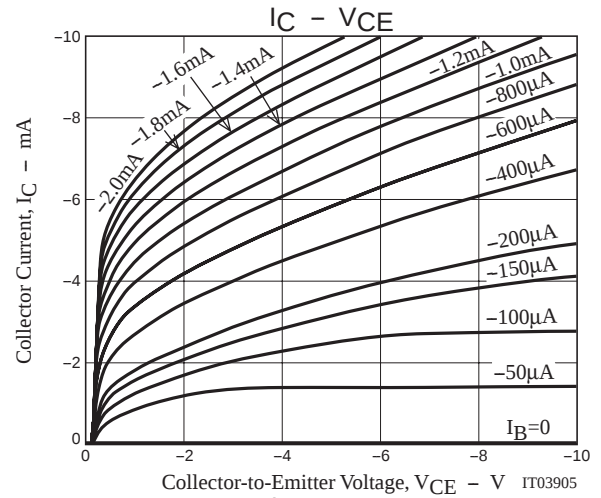
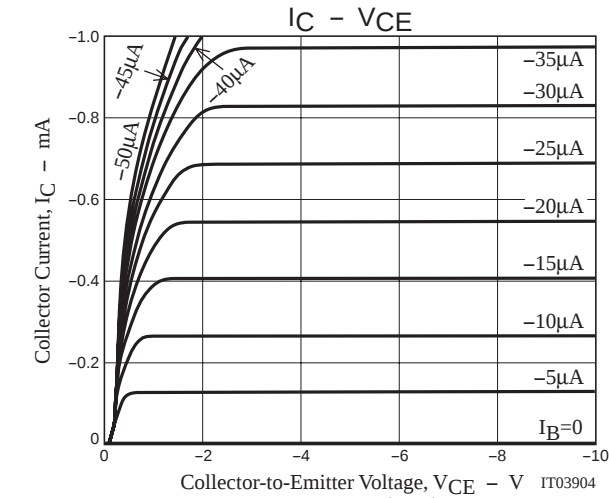
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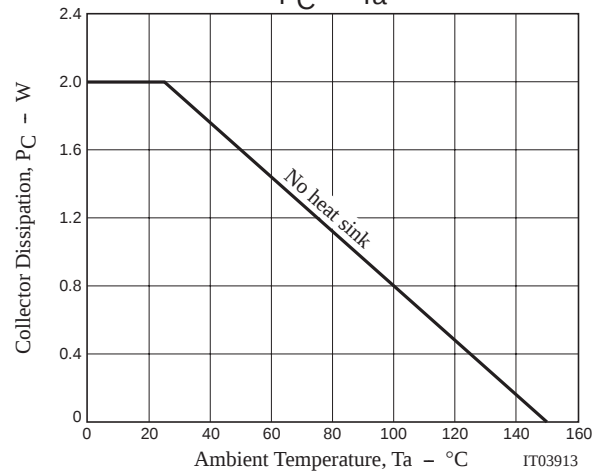
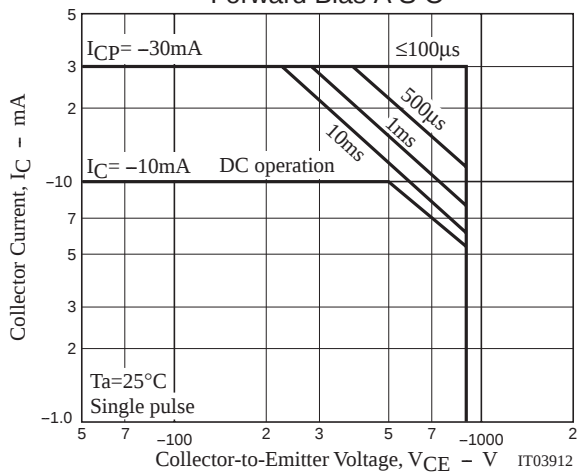
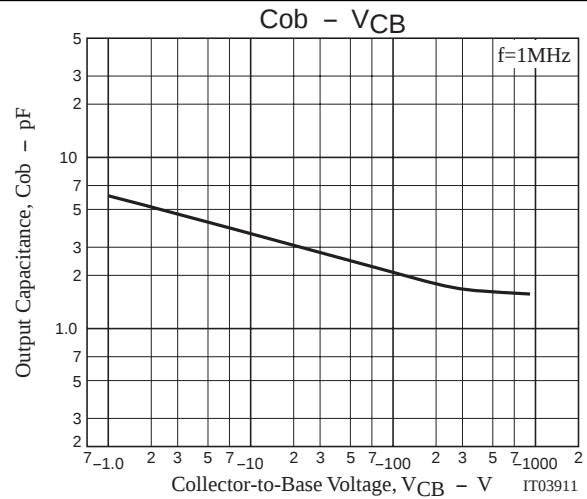
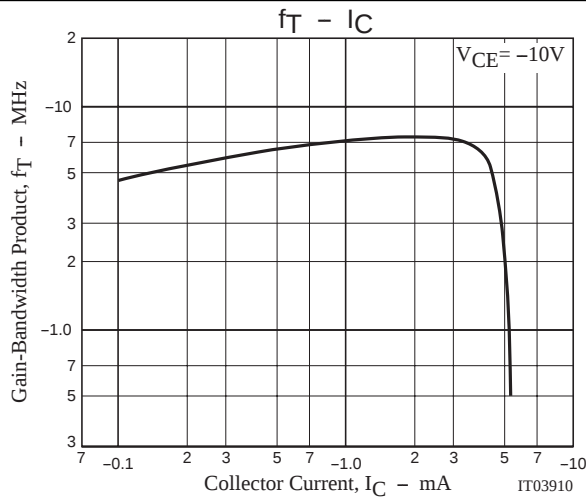
N1501 TS IM / 91098 HA (KT) / 92095 YK (KOTO) TA-0439 No.5183-1/3

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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
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
Transient Thermal Resistance	$R_{th(j-c)}$	junction-case			8.3	$^{\circ}C/W$





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