**Features**

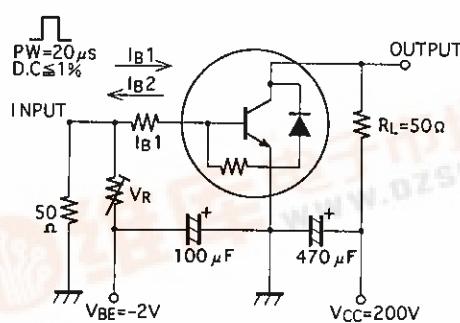
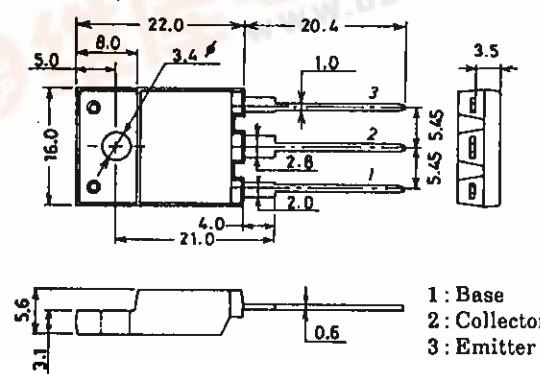
- High Speed : $t_r = 100\text{ns}$ typ.
- High breakdown voltage : $V_{CBO} = 1500\text{V}$.
- High reliability (Adoption of HVP process).
- Adoption of MBIT process.

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

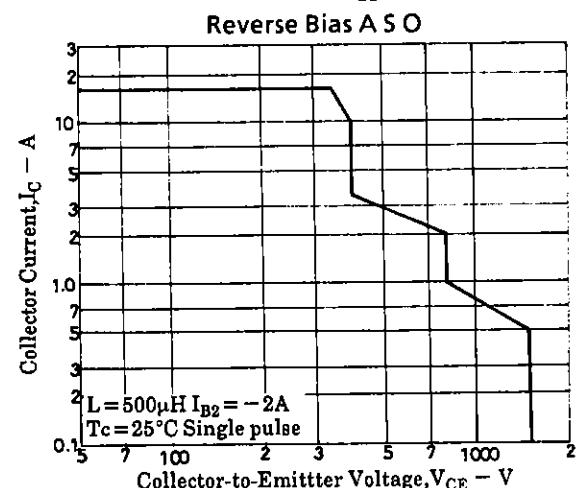
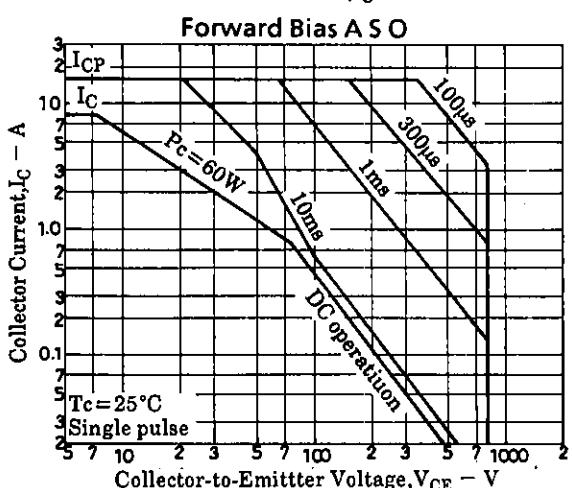
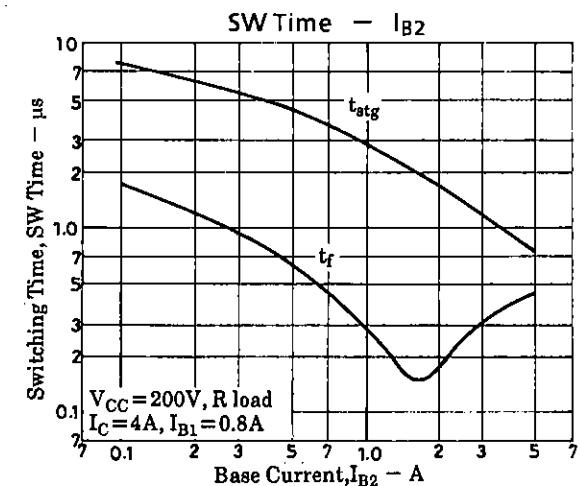
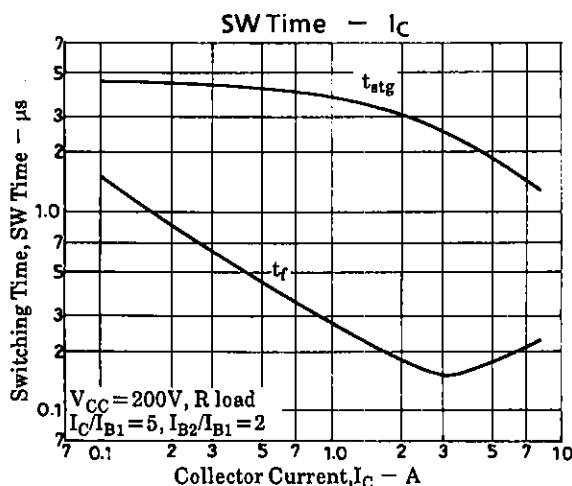
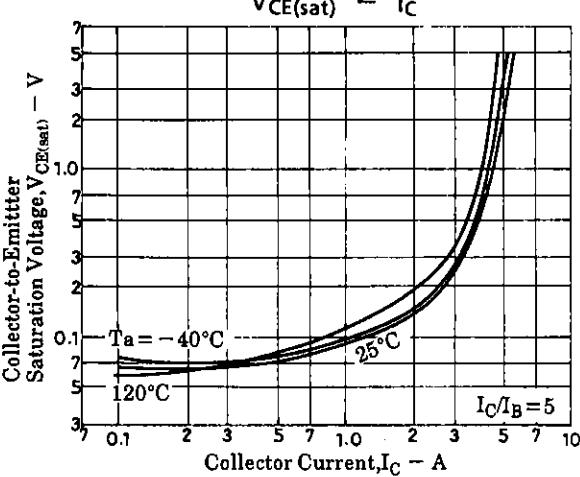
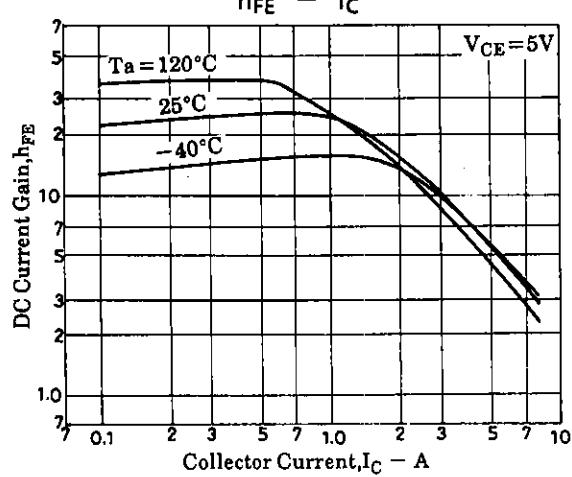
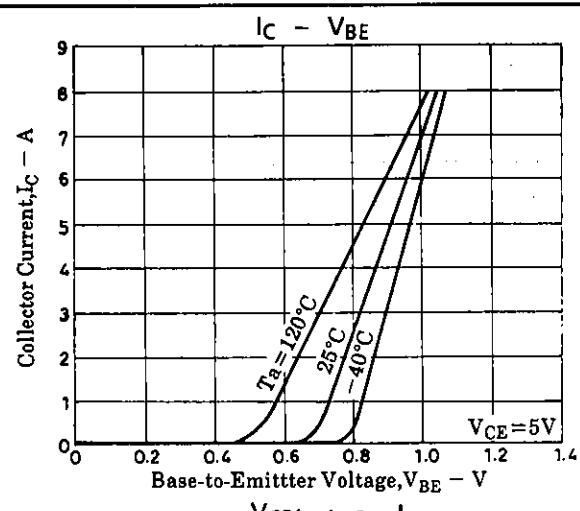
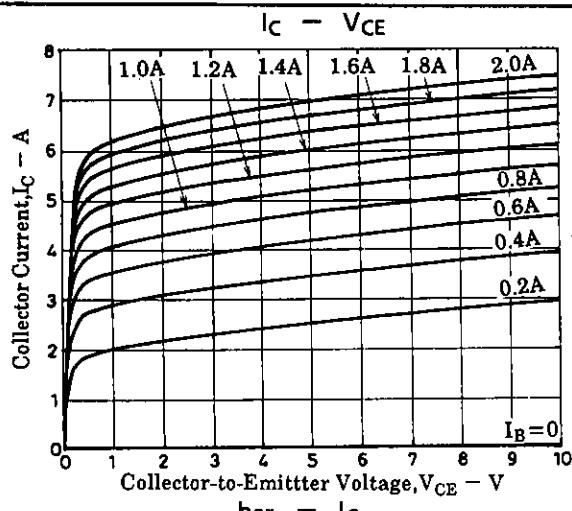
		unit
Collector-to-Base Voltage	V_{CBO}	1500 V
Collector-to-Emitter Voltage	V_{CEO}	800 V
Emitter-to-Base Voltage	V_{EBO}	6 V
Collector Current	I_C	8 A
Collector Current (Pulse)	I_{CP}	16 A
Collector Dissipation	P_C	3.0 W
		60 W
Junction Temperature	T_j	150 °C
Storage Temperature	T_{stg}	-55 to +150 °C

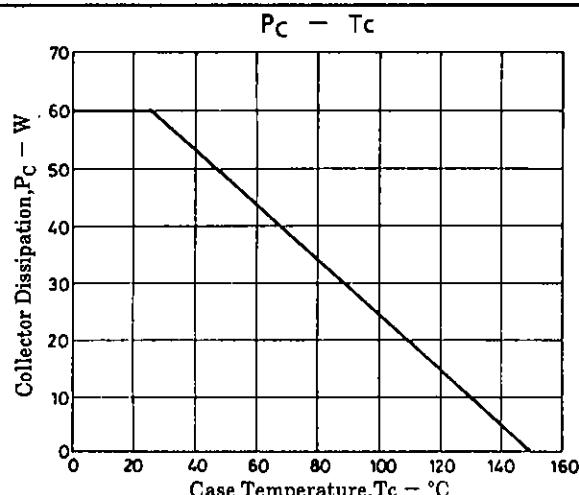
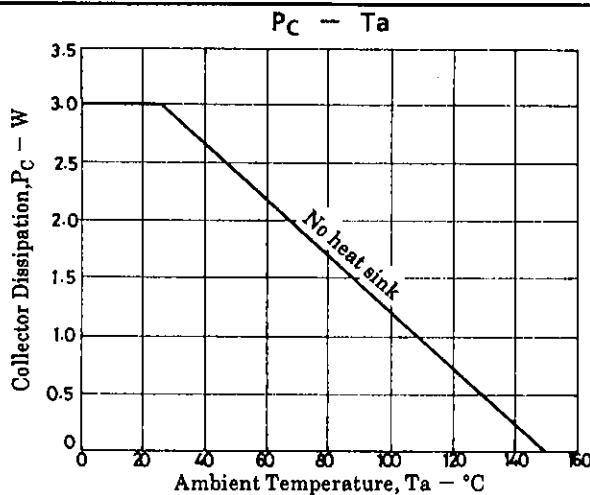
Electrical Characteristics at $T_a = 25^\circ\text{C}$

		min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 800\text{V}, I_E = 0$		10	μA
Collector Cutoff Current	I_{CES}	$V_{CE} = 1500\text{V}, R_{BE} = 0$		1.0	mA
Collector Sustaining Voltage	$V_{CEO(SUS)}$	$I_C = 100\text{mA}, I_B = 0$		800	V
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4\text{V}, I_C = 0$		1.0	mA
C-E Saturation Voltage	$V_{CE(\text{sat})}$	$I_C = 5\text{A}, I_B = 1.25\text{A}$		5	V
B-E Saturation Voltage	$V_{BE(\text{sat})}$	$I_C = 5\text{A}, I_B = 1.25\text{A}$		1.5	V
DC Current Gain	$h_{FE(1)}$	$V_{CE} = 5\text{V}, I_C = 1\text{A}$		20	30
	$h_{FE(2)}$	$V_{CE} = 5\text{V}, I_C = 5\text{A}$		4	7
Storage Time	t_{stg}	$I_C = 4\text{A}, I_{B1} = 0.8\text{A}, I_{B2} = -1.6\text{A}$		3.0	μs
Fall Time	t_f	$I_C = 4\text{A}, I_{B1} = 0.8\text{A}, I_{B2} = -1.6\text{A}$		0.1	μs

Switching Time Test Circuit**Package Dimensions 2039C**
(unit : mm)

SANYO:TO3PML





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