

SANYO	No.2478B	2SC4031
NPN Triple Diffused Planar Silicon Transistor		
900V/20mA Switching Applications		

Features

- High breakdown voltage ($V_{CEO \text{ min}} = 900V$).
- Small Output Capacitance ($C_{ob \text{ typ}} = 1.6pF$).
- Wide ASO (adoption of MBIT process).
- High reliability (adoption of HVP process).

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

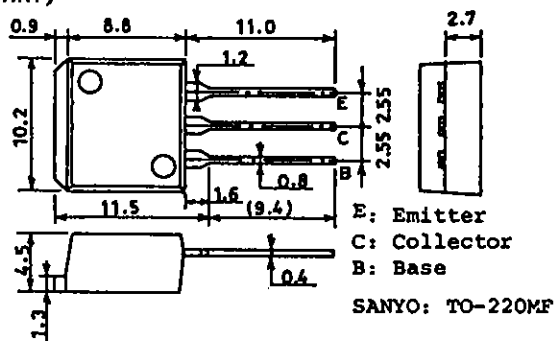
			unit
Collector to Base Voltage	V_{CBO}	2000	V
Collector to Emitter Voltage	V_{CEO}	900	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current	I_C	20	mA
Peak Collector Current	i_{cp}	60	mA
Collector Dissipation	P_C	1.65	W
		1.2	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

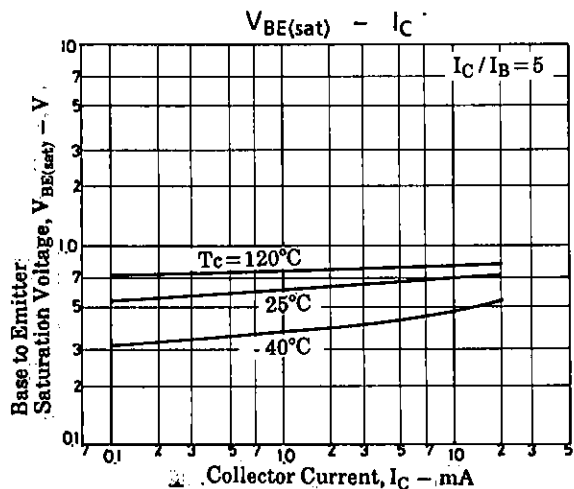
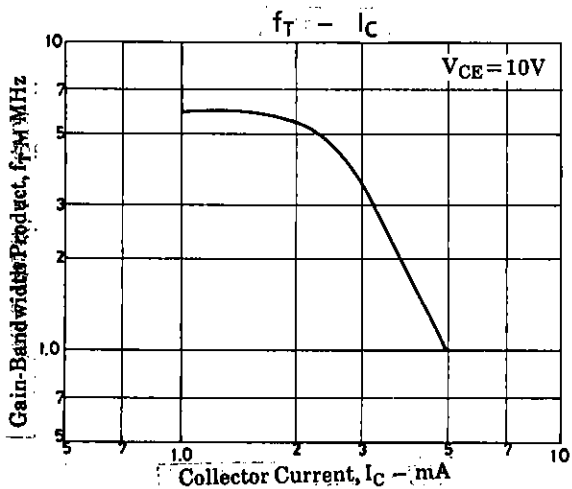
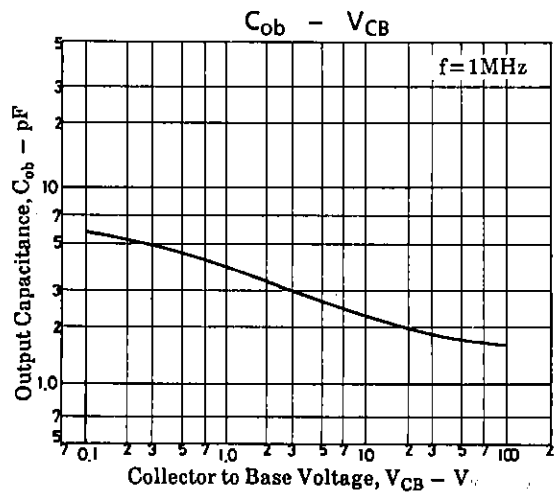
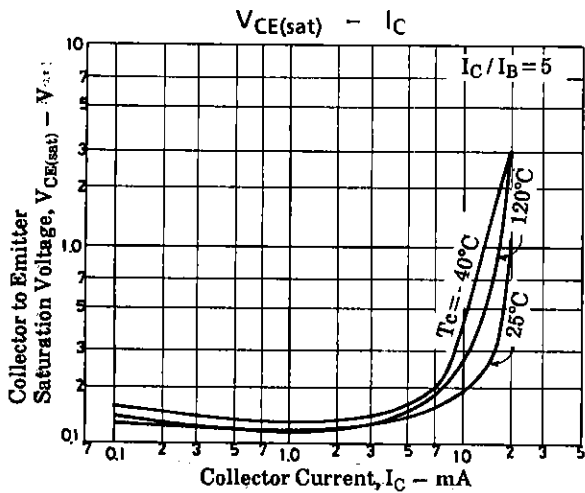
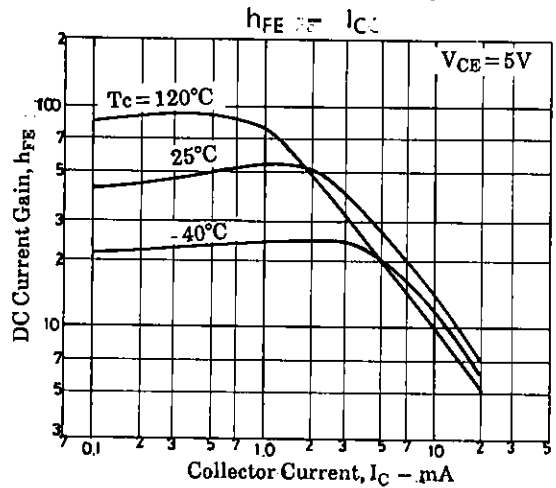
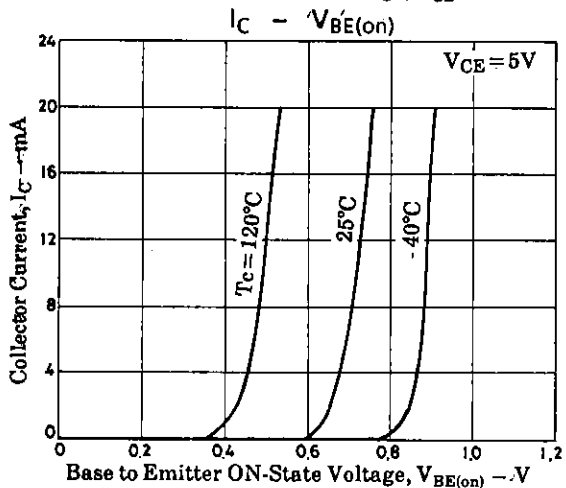
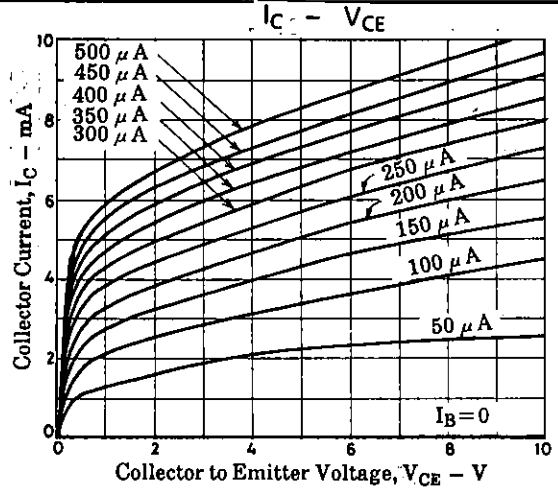
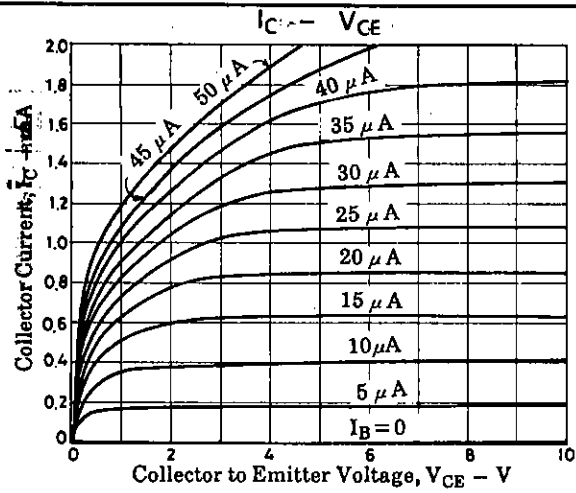
$T_c = 25^\circ C$

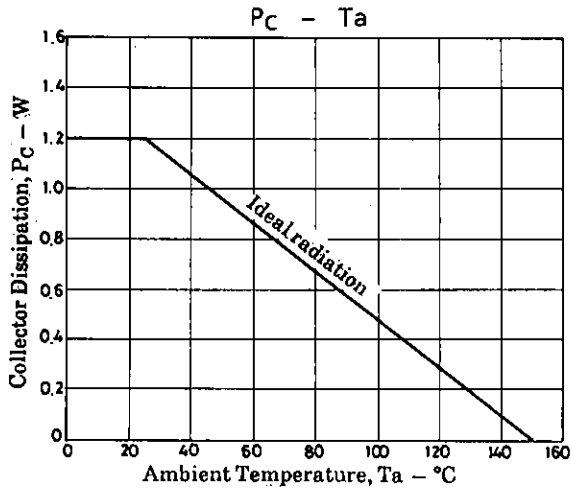
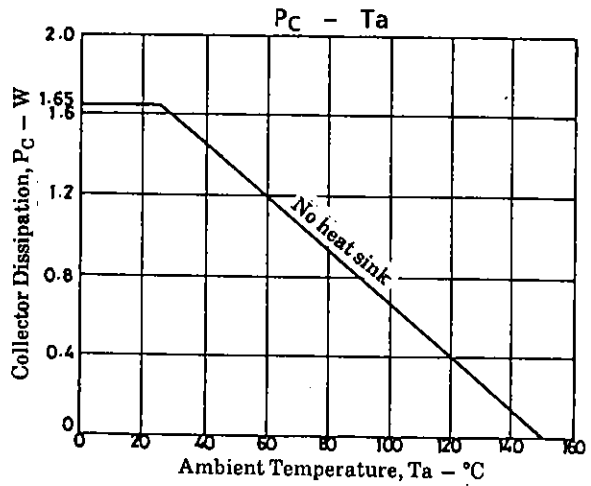
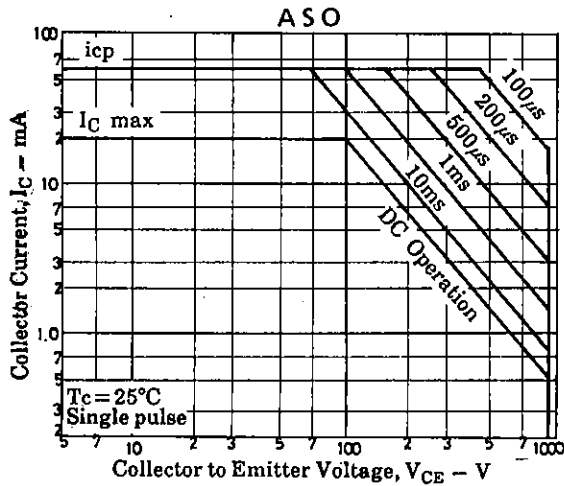
Electrical Characteristics at $T_a = 25^\circ C$

			min	typ	max	unit
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}	$V_{CE} = 5V, I_C = 1mA$	20	50	120	
Gain-Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 1mA$		6		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = 2mA, I_B = 400\mu A$			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = 2mA, I_B = 400\mu A$			2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 1mA, I_E = 0$	2000			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1mA, R_{BE} = \infty$	900			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 1mA, I_C = 0$	5			V
Output Capacitance	C_{ob}	$V_{CB} = 100V, f = 1MHz$		1.6		pF

Package Dimensions 2049B
(unit: mm)







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