Ordering number: EN5291

SANYO

No.5291

2SC5297

NPN Triple Diffused Planar Silicon Transistor

Ultrahigh-Definition CRT Display Horizontal Deflection Output Applications

Features

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

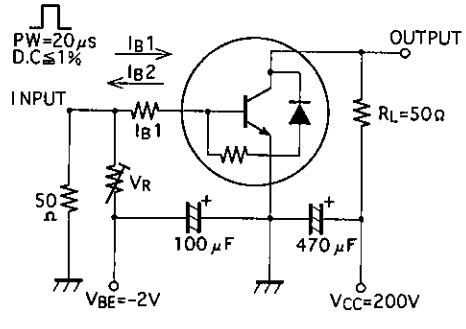
Absolute Maximum Ratings at Ta = 25°C

				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
		Tc = 25°C	60	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		−55 to +150	°C

Electrical Characteristics at Ta = 25°C

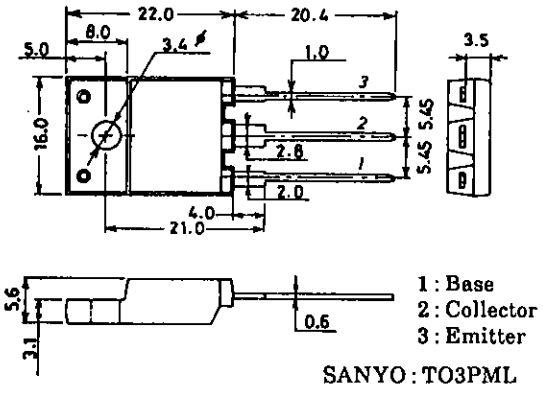
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 800V, I_E = 0			10	μA
Collector Cutoff Current	I_{CES}	V_{CE} = 1500V, R_{BE} = 0			1.0	mA
Collector Sustaining Voltage	$V_{CEO(SUS)}$	I_C = 100mA, I_B = 0	800			V
Emitter Cutoff Current	I_{EBO}	V_{EB} = 4V, I_C = 0			1.0	mA
C-E Saturation Voltage	$V_{CE(sat)}$	I_C = 5A, I_B = 1.25A			5	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C = 5A, I_B = 1.25A			1.5	V
DC Current Gain	$h_{FE(1)}$	V_{CE} = 5V, I_C = 1A	20		30	
	$h_{FE(2)}$	V_{CE} = 5V, I_C = 5A	4		7	
Storage Time	t_{stg}	I_C = 4A, I_{B1} = 0.8A, I_{B2} = −1.6A			3.0	μs
Fall Time	t_f	I_C = 4A, I_{B1} = 0.8A, I_{B2} = −1.6A	0.1		0.2	μs

Switching Time Test Circuit



Package Dimensions 2039C

(unit : mm)



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