NPN Triple Diffused Planar Silicon Transistor



2SC3644

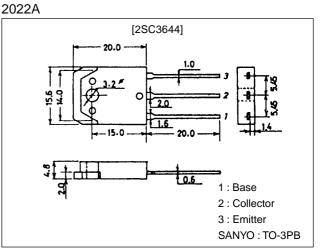
Ultrahigh-Definition CRT Display Horizontal Deflection Output Applications

Features

- · High reliability (Adoption of HVP process).
- · High speed.
- · High breakdown voltage.
- · Adoption of MBIT process.

Package Dimensions

unit:mm



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CBO}		1200	V
Collector-to-Emitter Voltage	VCEO		800	V
Emitter-to-Base Voltage	VEBO		7	V
Collector Current	Ι _C		12	A
Collector Current (Pulse)	ICP		25	A
Collector Dissipation	PC	Tc=25°C	150	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

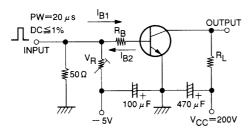
Electrical Characteristics at Ta = 25°C

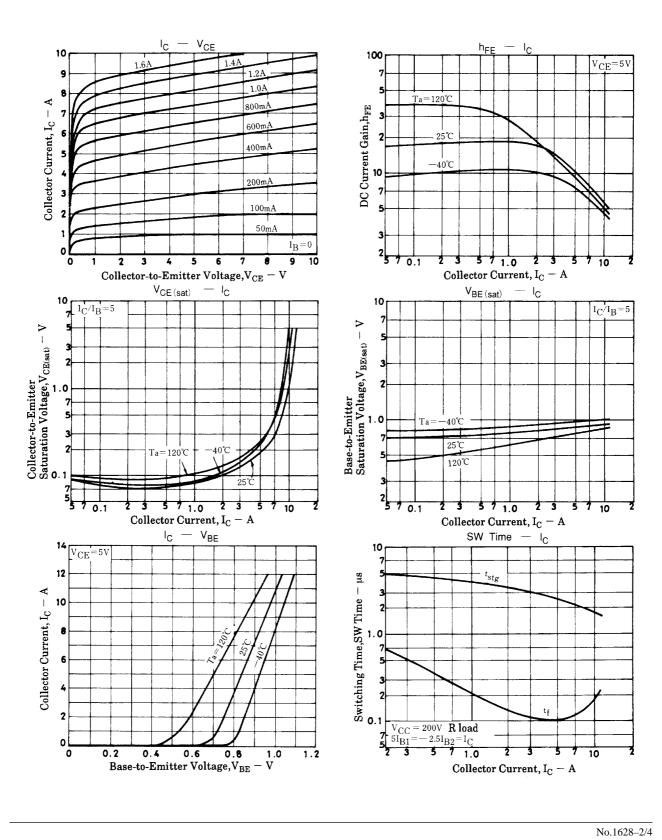
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Unit
Collector Cutoff Current	ICBO	V _{CB} =800V, I _E =0			10	μA
	ICES	V _{CE} =1200V, R _{BE} =0			0.5	mA
Collector-to-Emitter Sastain Voltage	V _{CEO(sus)}	I _C =100mA, I _B =0	800			V
Emitter Cutoff Current	IEBO	V _{EB} =5V, I _C =0			1	mA
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =8A, I _B =1.6A			5	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =8A, I _B =1.6A			1.5	V
DC Current Gain	hFE	V _{CE} =5V, I _C =1.6A	8			
Storage Time	tstg	I _C =8A, I _{B1} =1.6A, I _{B2} =-3.2A			3.0	μs
Fall Time	t _f	I _C =8A, I _{B1} =1.6A, I _{B2} =-3.2A		0.1	0.2	μs

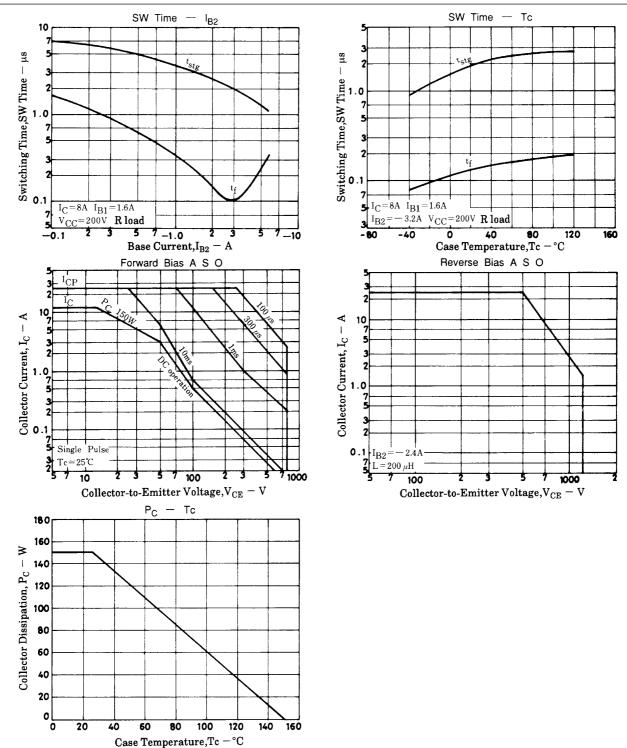
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Switching Time Test Circuit







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