

2SC3688

NPN Triple Diffused Planar Silicon Transistor
VERY HIGH-DEFINITION CRT DISPLAY
HORIZONTAL DEFLECTION OUTPUT

- . Very high-definition color display horizontal deflection output

Features

- . Fast speed (t_f typ=100ns).
- . High breakdown voltage (V_{CBO} =1500V).
- . High reliability (adoption of HVP process).
- . Adoption of MBIT process.

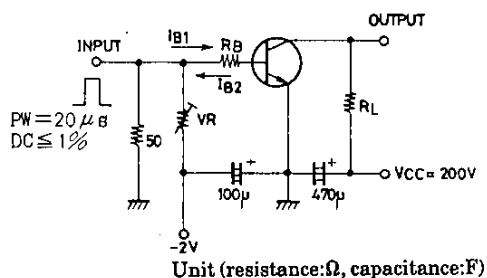
Absolute Maximum Ratings at Ta=25°C

Absolute Maximum Ratings at Ta=25°C			unit
Collector-to-Base Voltage	V _{CB0}	1500	V
Collector-to-Emitter Voltage	V _{CE0}	800	V
Emitter-to-Base Voltage	V _{EB0}	6	V
Collector Current	I _C	10	A
Peak Collector Current	i _{cp}	25	A
Collector Dissipation	P _C	150	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

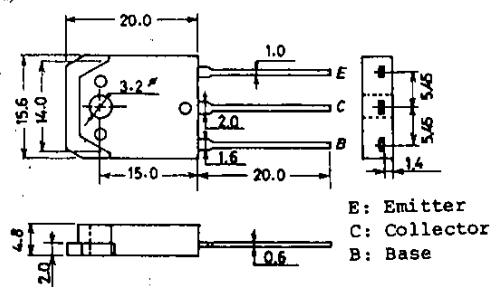
Electrical Characteristics at Ta=25°C

Electrical Characteristics at Ta=25°C			min	typ	max	unit
Collector Cutoff Current	I_{CES}	$V_{CE}=1500V, R_{BE}=0$			1.0	mA
Collector Sustain 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
Collector-to-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=8A, I_B=2.0A$			5	V
Base-to-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=8A, I_B=2.0A$			1.5	V
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=1.0A$	8			
Storage Time	t_{stg}	$I_C=6A, I_{B1}=1.2A, I_{B2}=-2.4A$			3.0	μs
Fall Time	t_f	$I_C=6A, I_{B1}=1.2A, I_{B2}=-2.4A$		0.1	0.2	μs

Switching Time Test Circuit



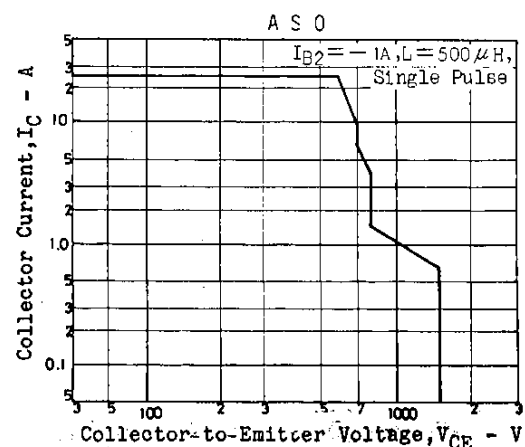
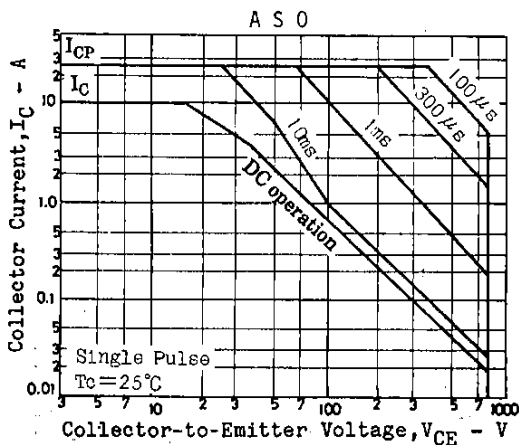
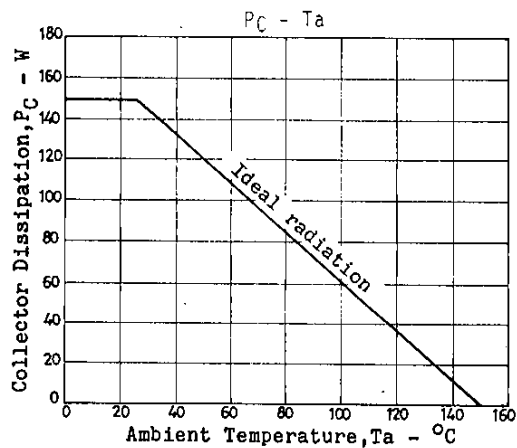
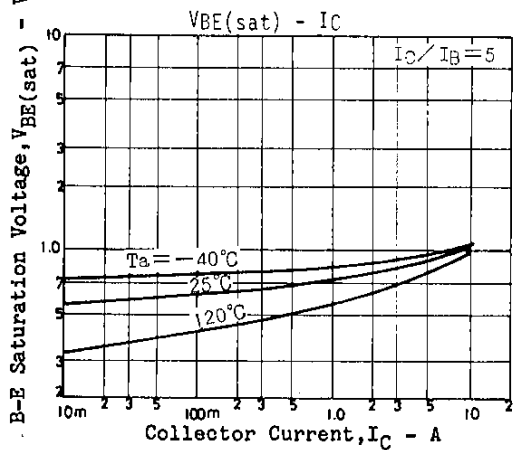
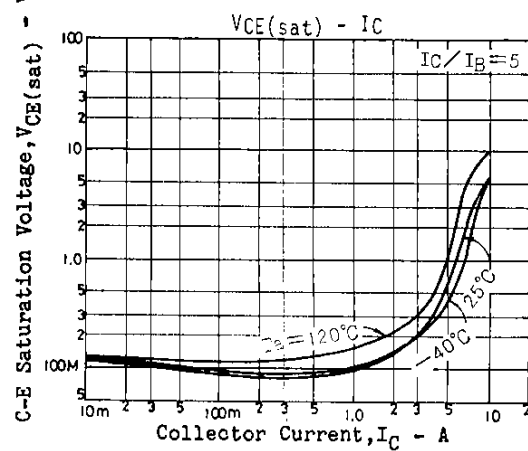
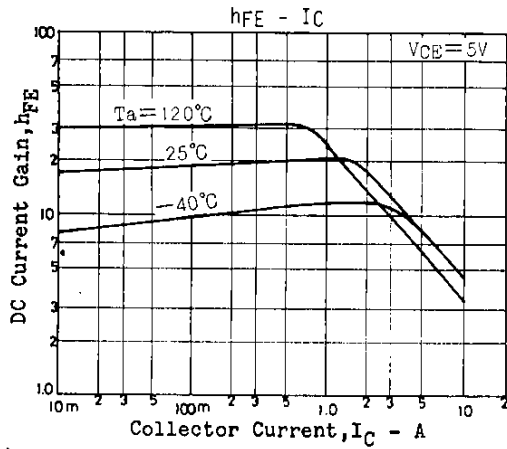
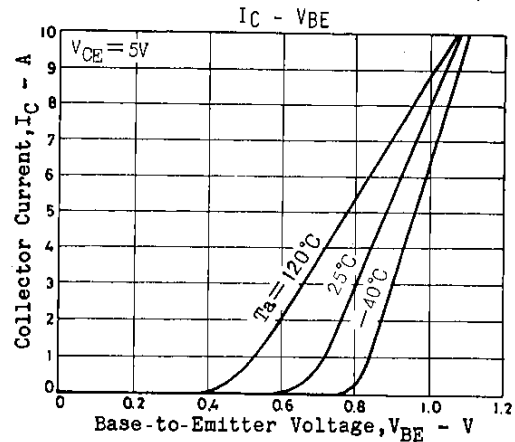
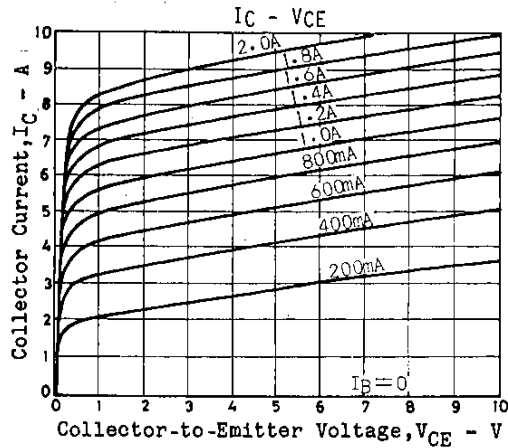
Package Dimensions 2022 (unit : mm)



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