

SANYO	No.2488	2 S C 3 6 6 4
NPN Triple Diffused Planar Type Darlington Silicon Transistor HIGH-VOLTAGE SWITCHING APPLICATIONS		

Applications

- . Induction cookers
- . High-voltage, high-power switching

Features

- . Fast speed (adoption of MBIT process)
- . High breakdown voltage ($V_{CB0}=800V$)
- . High reliability (adoption of HVP process)
- . On-chip damper diode

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

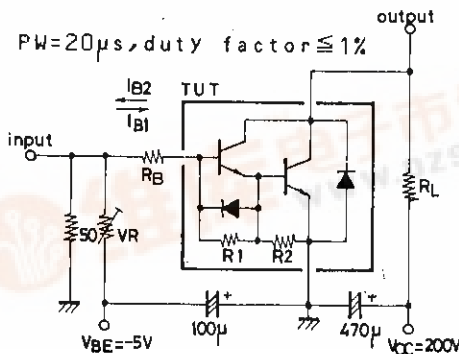
			unit
Collector-to-Base Voltage	V_{CB0}	800	V
Collector-to-Emitter Voltage	V_{CEO}	400	V
Emitter-to-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	20	A
Peak Collector Current	i_{cp}	40	A
Base Current	I_B	3	A
Collector Dissipation	P_C	150	W
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature	T_{stg}	-55 to +150	$^{\circ}C$

$T_c=25^{\circ}C$

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

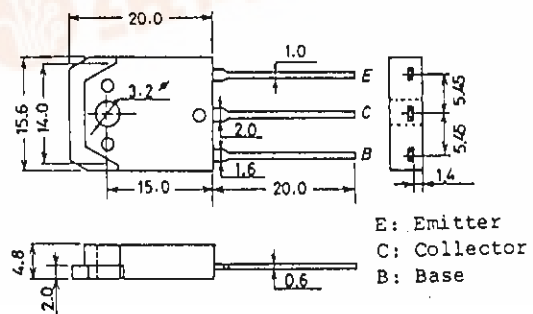
			min	typ	max	unit
Collector Cutoff Current	I_{CB0}	$V_{CB}=800V, I_E=0$			1.0	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=5V, I_C=0$			600	mA
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=20A$	80			
Diode Forward Voltage	V_F	$I_{EC}=20A$			2.0	V
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=20A, I_B=1A$			2.0	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=20A, I_B=1A$			2.5	V
C-E Sustain Voltage	$V_{CEO(sus)}$	$I_C=100mA$	400			V
Fall Time	t_f	$I_C=20A, I_{B1}=1A, I_{B2}=-4A,$ $V_{CC}=200V, R_L=10\Omega$			1.5	μs

Switching Time Test Circuit



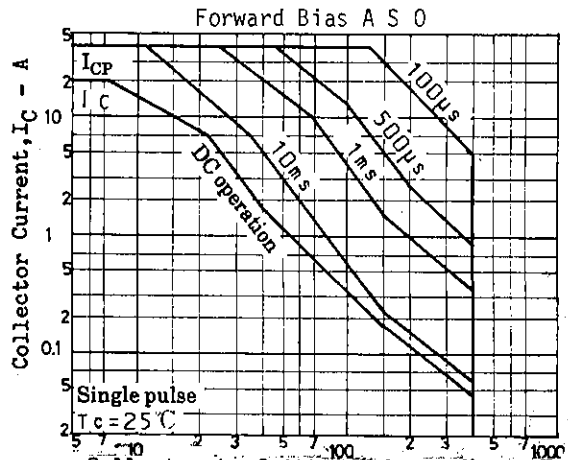
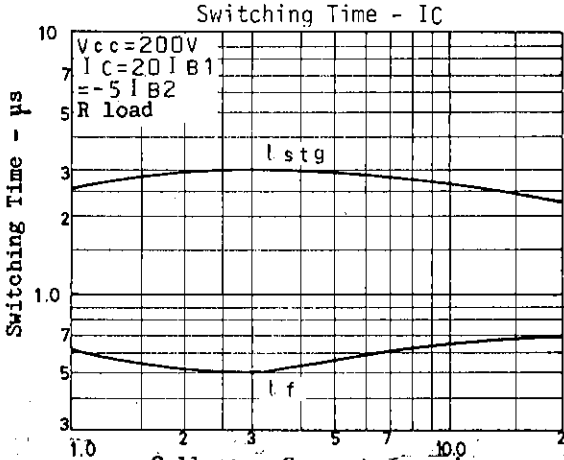
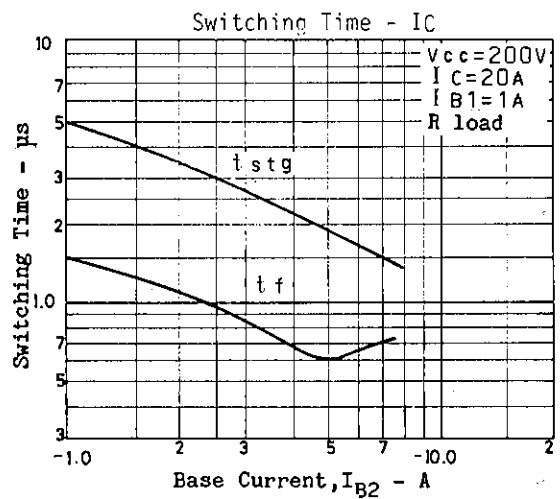
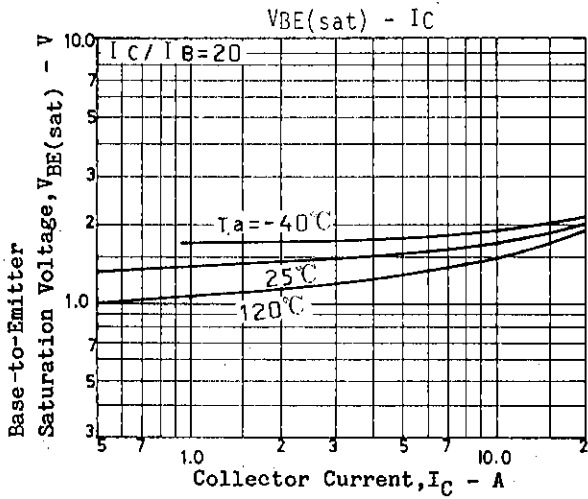
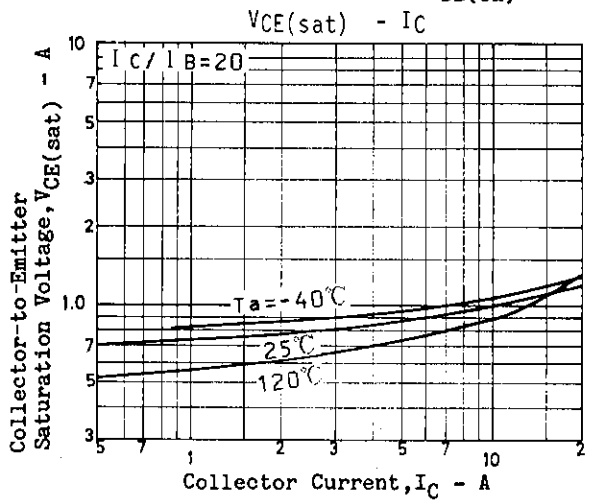
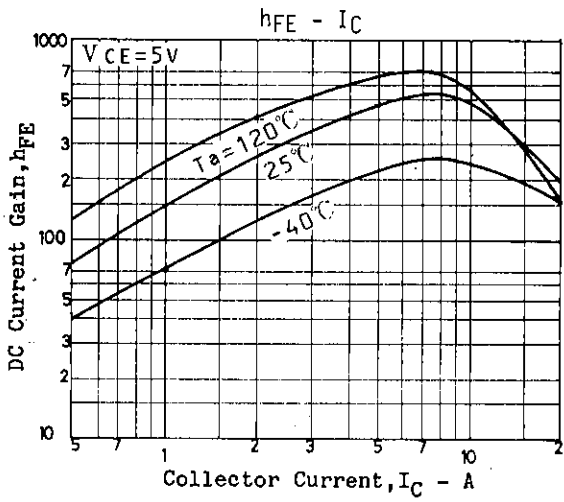
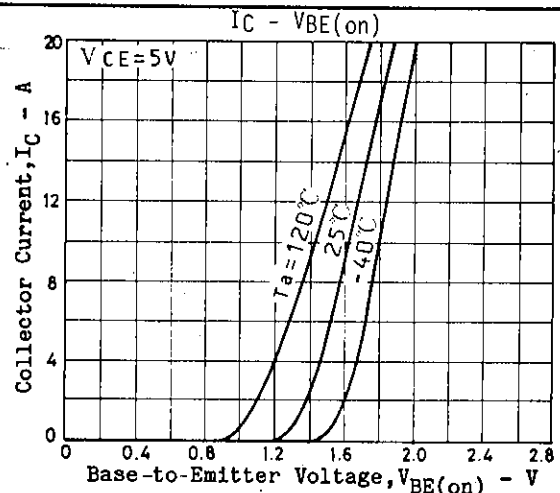
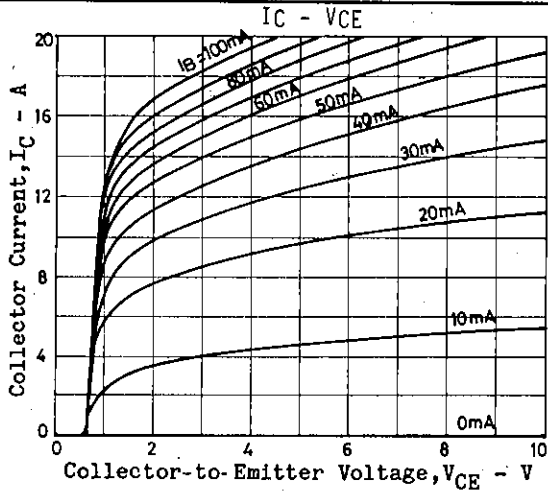
Package Dimensions 2022

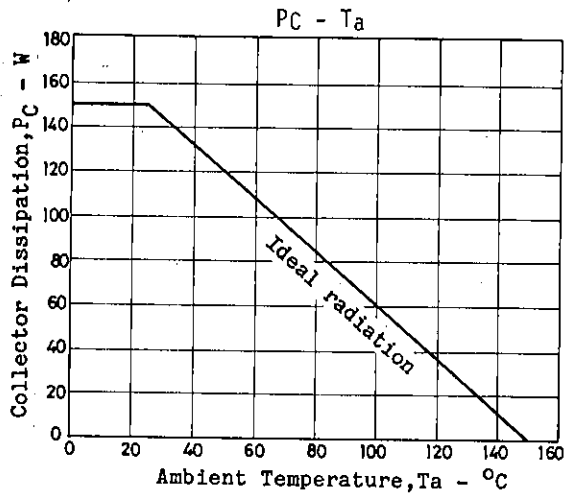
(unit: mm)



SANYO: TO3PB

Unit (Resistance : Ω , Capacitance : F)





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