

<b>SANYO</b>	No.2548B	<b>2SC4119</b>
		NPN Triple Diffused Planar Silicon Darlington Transistor
		<b>800V/15A Driver Applications</b>

**Applications**

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

**Features**

- . High speed (adoption of MBIT process)
- . High breakdown voltage ( $V_{CBO}=1500V$ )
- . On-chip damper diode
- . High reliability

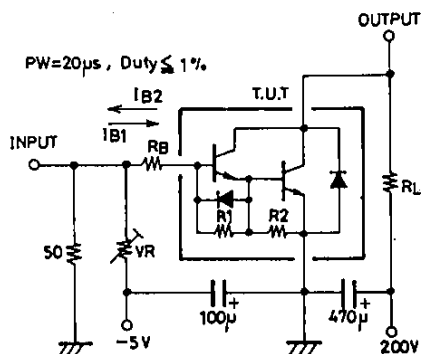
**Absolute Maximum Ratings at  $T_a=25^{\circ}C$**

			unit
Collector-to-Base Voltage	$V_{CBO}$	1500	V
Collector-to-Emitter Voltage	$V_{CEO}$	800	V
Emitter-to-Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	15	A
Collector Current (Pulse)	$I_{CP}$	30	A
Base Current	$I_B$	3	A
Collector Dissipation	$P_C$	3.5	W
		$T_c=25^{\circ}C$	250
Junction Temperature	$T_j$	150	$^{\circ}C$
Storage Temperature	$T_{stg}$	-55 to +150	$^{\circ}C$

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

			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=800V, I_E=0$			0.1	mA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			600	mA
DC Current Gain	$h_{FE}$	$V_{CE}=5V, I_C=15A$	25			
Collector Sustain Voltage	$V_{CEO}(sus)$	$I_C=100mA, I_B=0$	800			V
C-E Saturation Voltage	$V_{CE}(sat)$	$I_C=15A, I_B=0.75A$			3.0	V
B-E Saturation Voltage	$V_{BE}(sat)$	$I_C=15A, I_B=0.75A$			2.5	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=5mA, I_E=0$	1500			V
Diode Forward Voltage	$V_F$	$I_{EC}=15A$			2.0	V
Fall Time	$t_f$	$I_C=15A, I_{B1}=1A, I_{B2}=-5A$ $V_{CC}=200V, R_L=13.3\Omega$			2.0	$\mu s$

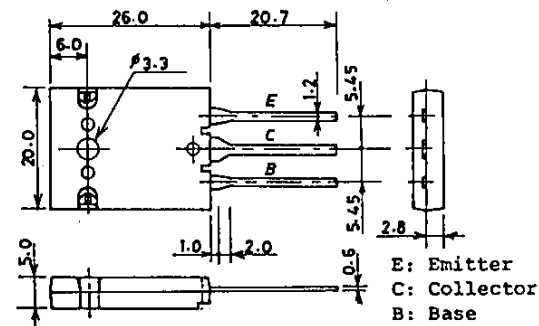
**Switching Time Test Circuit**



Unit (Resistance :  $\Omega$ , Capacitance : F)

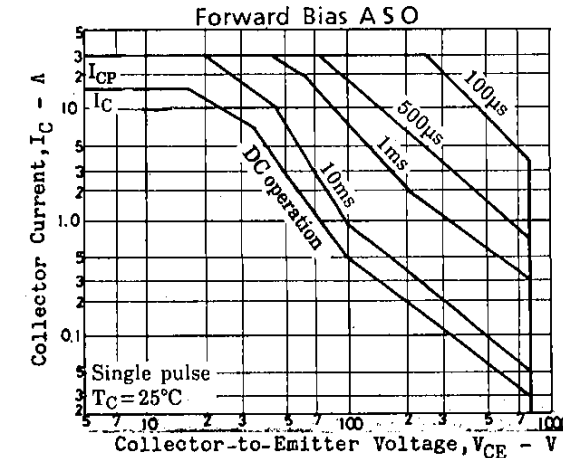
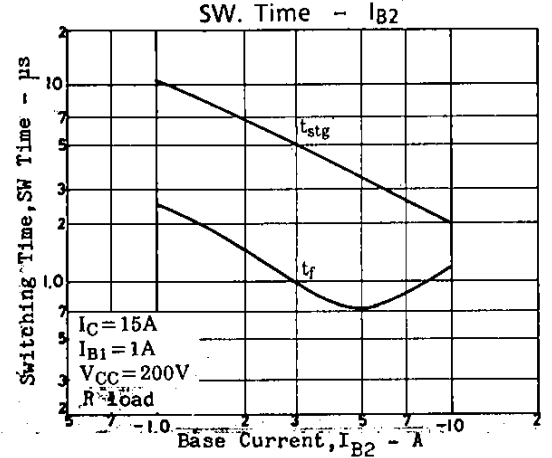
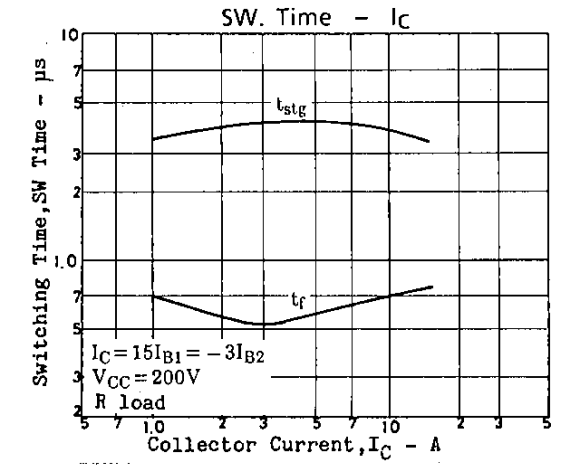
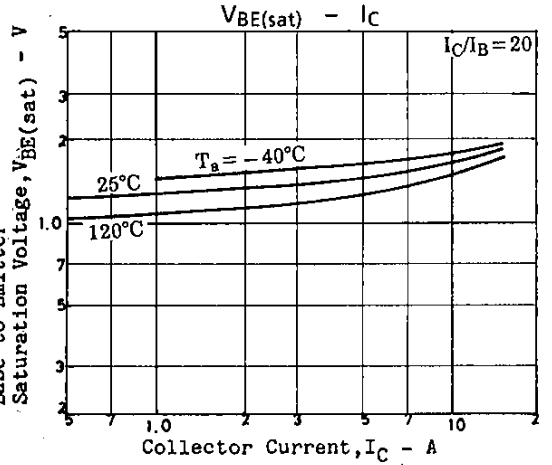
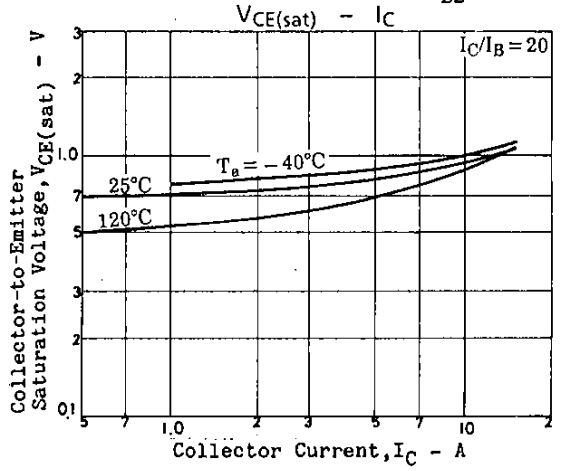
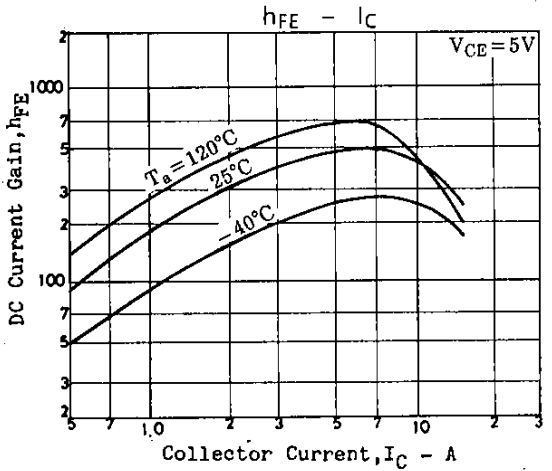
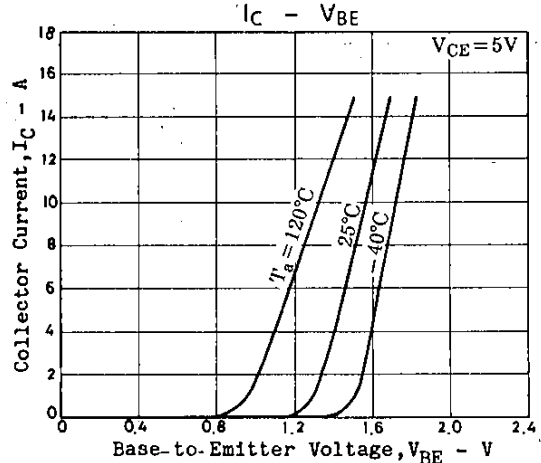
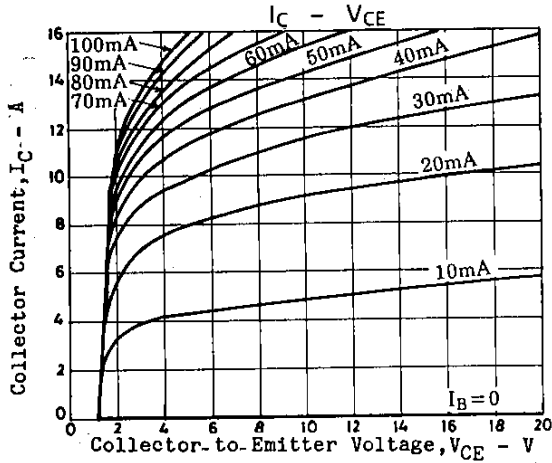
**Package Dimensions 2048**

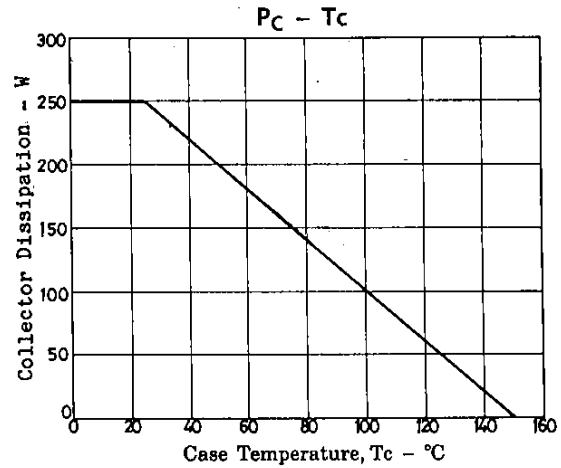
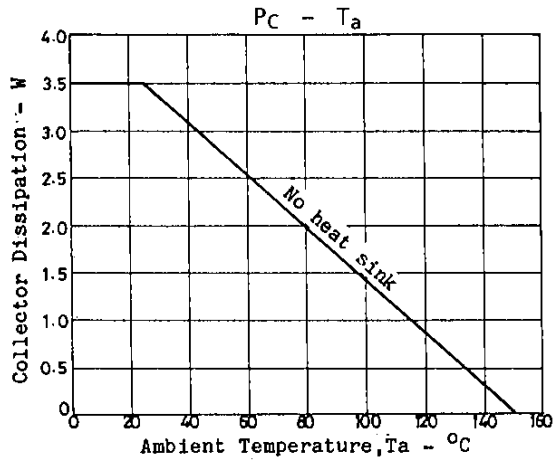
(unit: mm)



SANYO: TO-3PBL

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