

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

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

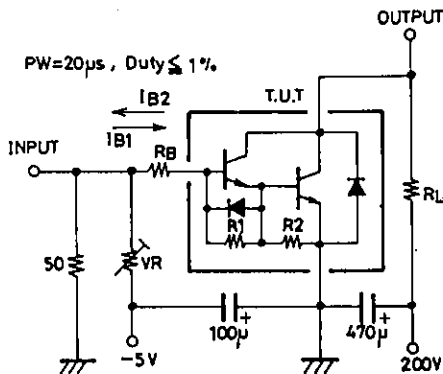
Absolute Maximum Ratings at $T_a=25^\circ C$

Collector-to-Base Voltage	V_{CBO}	1500	V	unit
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	W
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	μs

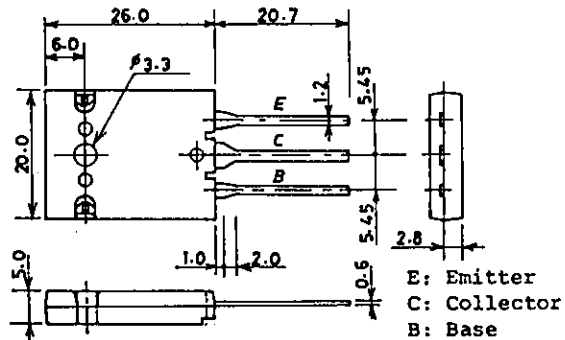
Switching Time Test Circuit



Unit (Resistance : Ω , Capacitance : F)

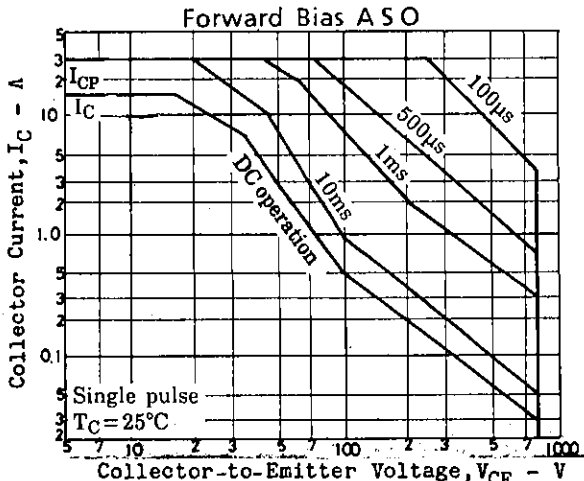
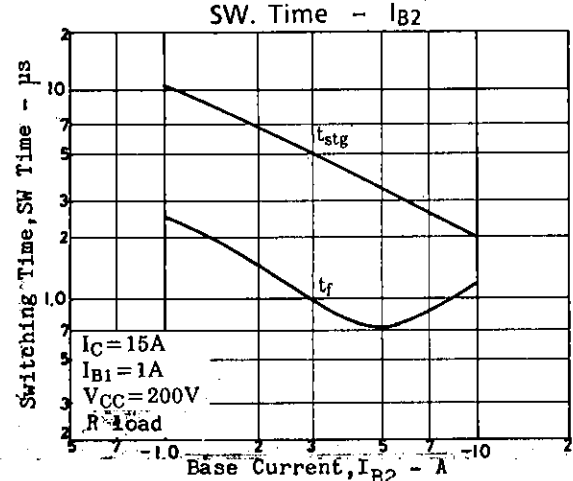
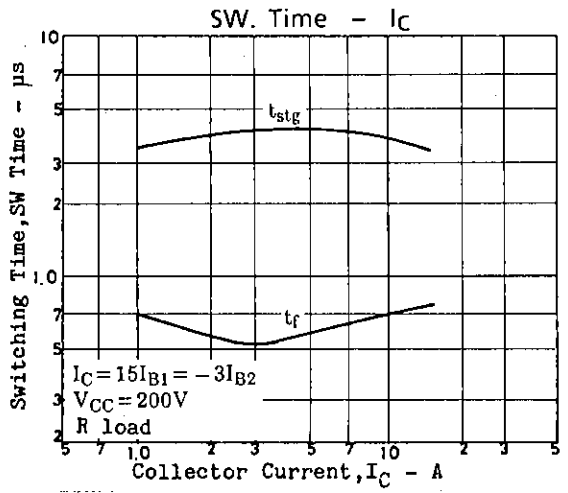
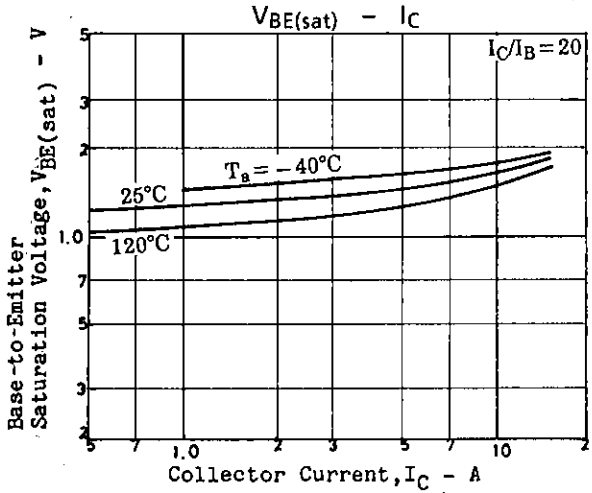
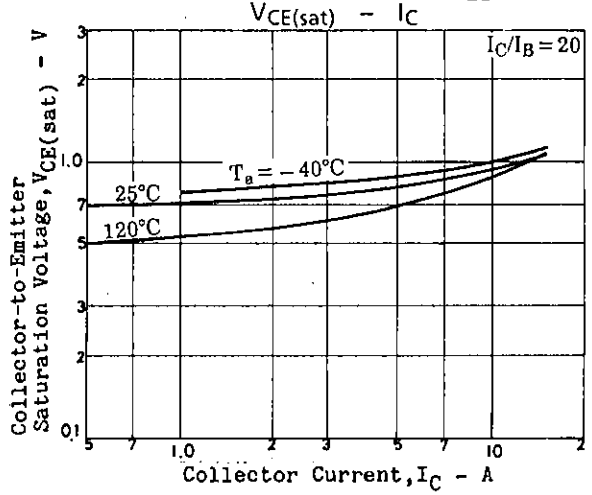
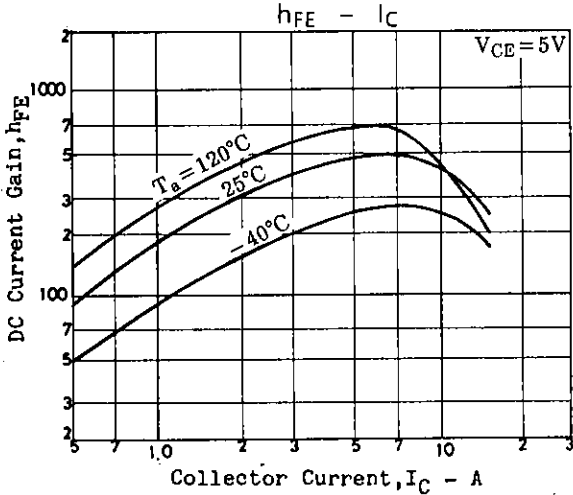
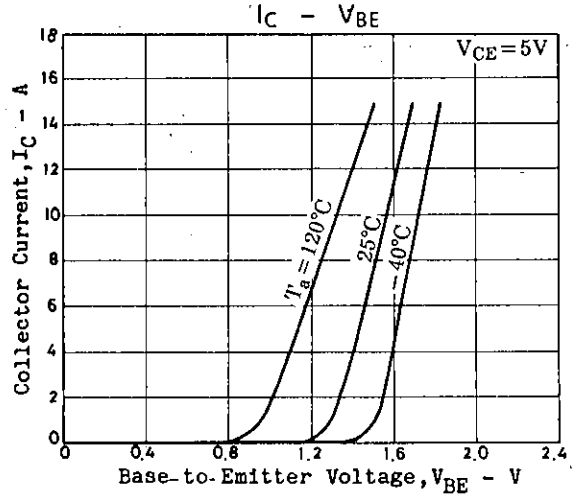
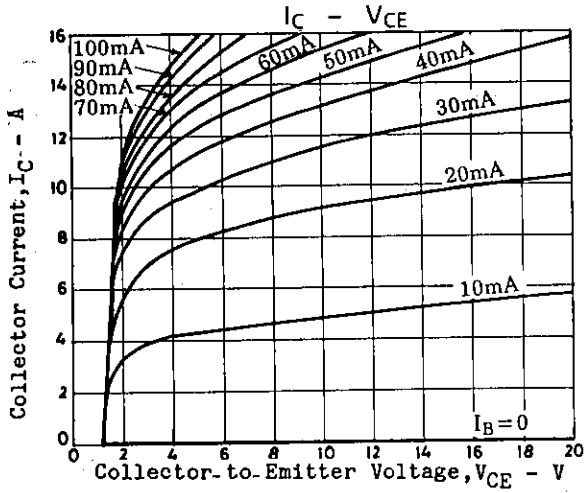
Package Dimensions 2048

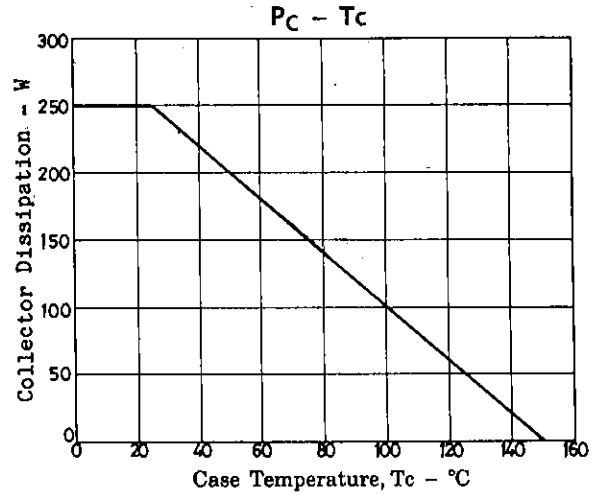
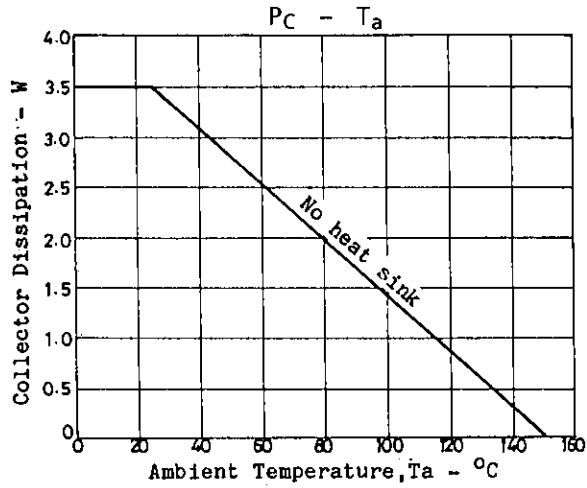
(unit:mm)



SANYO: TO-3PBL

2SC4119





- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees, jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.