

2SC4897

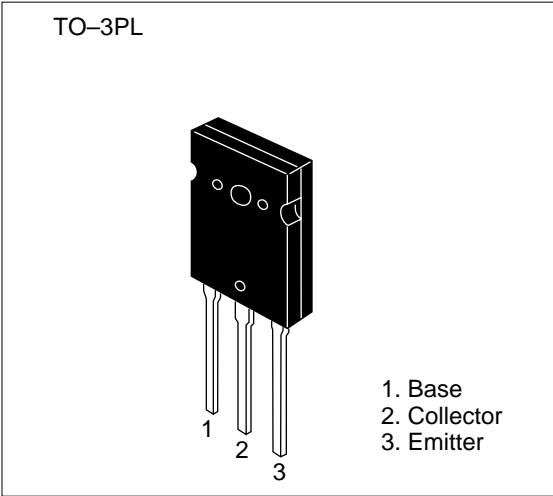
Silicon NPN Triple Diffused

Application

Character Display Horizontal Deflection Output

Features

- High speed switching time: 0.5  $\mu$ s max
- High breakdown voltage, high current:  
 $V_{CBO} = 1500\text{ V}$ ,  $I_C = 20\text{ A}$
- Suitable for large size CRT Display



Absolute Maximum Ratings ( $T_a = 25^{\circ}\text{C}$ )

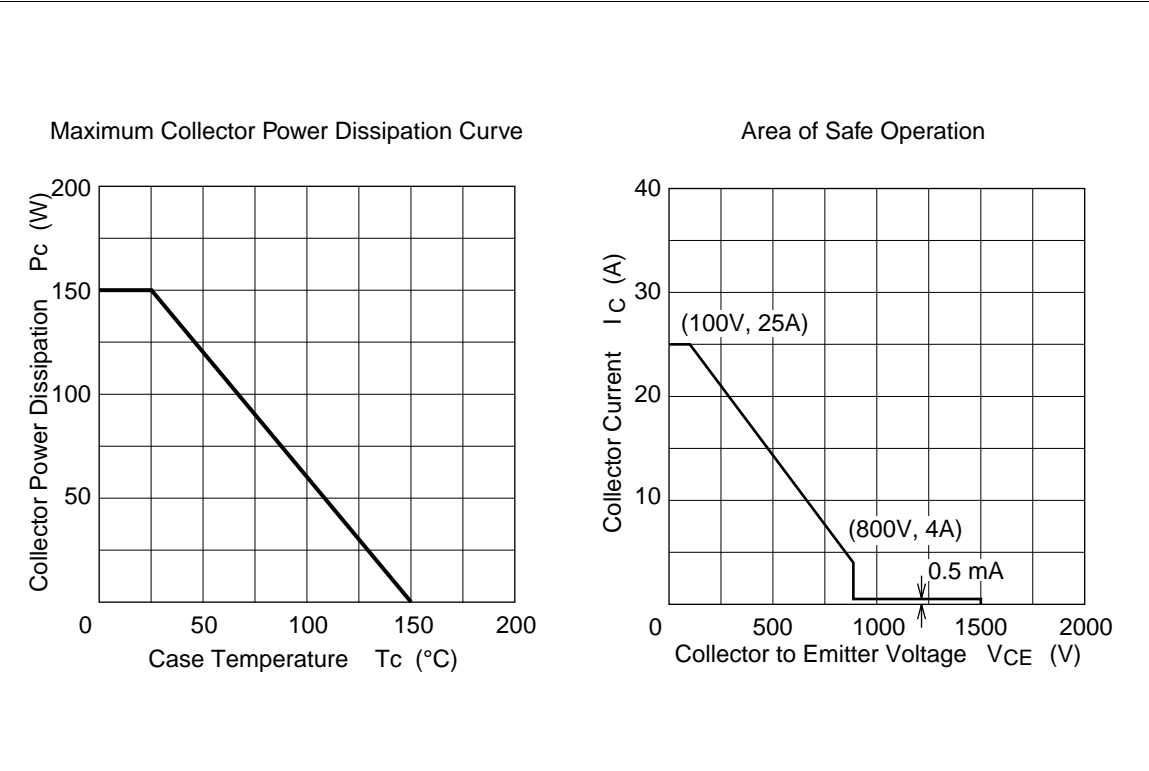
Item	Symbol	Rating	Unit
Collector to base voltage	$V_{CBO}$	1500	V
Collector to emitter voltage	$V_{CEO}$	800	V
Emitter to base voltage	$V_{EBO}$	6	V
Collector current	$I_C$	20	A
Collector surge current	$i_c(\text{surge})$	25	A
Collector power dissipation	$P_C^{*1}$	150	W
Junction temperature	$T_j$	150	$^{\circ}\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^{\circ}\text{C}$

Note: 1. Value at  $T_C = 25^{\circ}\text{C}$ .

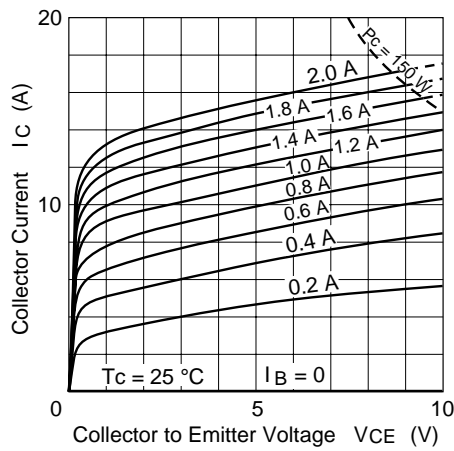
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Electrical Characteristics (Ta = 25°C)

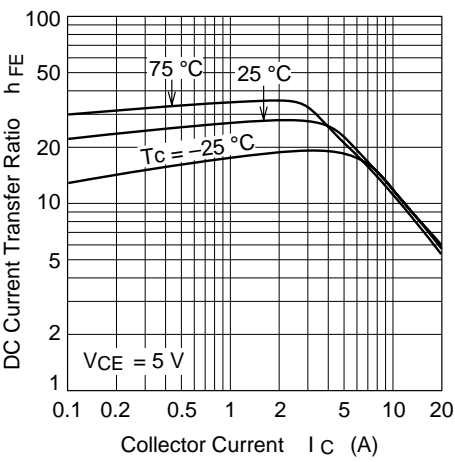
Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	800	—	—	V	$I_C = 10\text{ mA}$ , $R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	6	—	—	V	$I_E = 10\text{ mA}$ , $I_C = 0$
Collector cutoff current	$I_{CES}$	—	—	500	$\mu\text{A}$	$V_{CE} = 1500\text{ V}$ , $R_{BE} = 0$
DC current transfer ratio	$h_{FE}$	—	—	38	—	$V_{CE} = 5\text{ V}$ , $I_C = 1\text{ A}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	5	V	$I_C = 14\text{ A}$ , $I_B = 3.5\text{ A}$
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	1.5	V	$I_C = 14\text{ A}$ , $I_B = 3.5\text{ A}$
Fall time	$t_f$	—	—	0.5	$\mu\text{s}$	$I_{CP} = 10\text{ A}$ , $I_{B1} = 2\text{ A}$ $I_{B2} \approx -3\text{ A}$ , $f_H = 31.5\text{ kHz}$



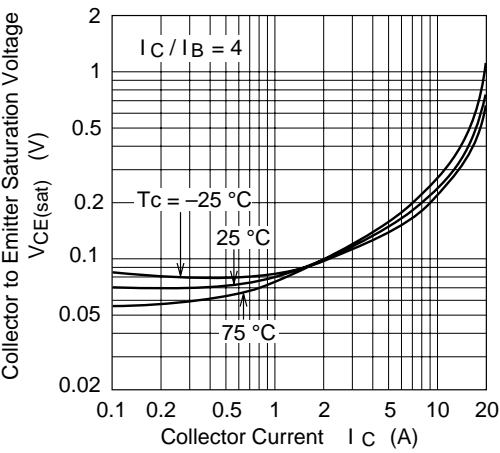
Typical Output Characteristics



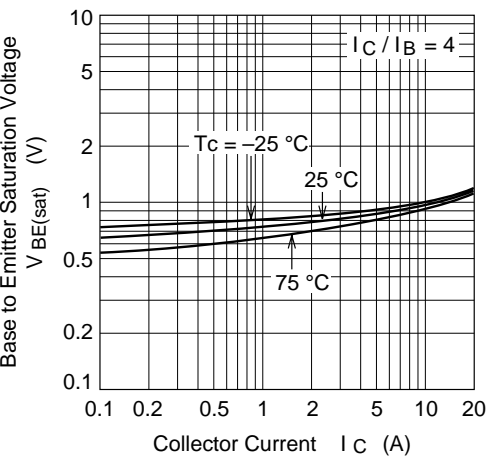
DC Current Transfer Ratio vs. Collector Current



Collector to Emitter Saturation Voltage vs. Collector Current



Base to Emitter Saturation Voltage vs. Collector Current



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Collector to Emitter Saturation Voltage  
vs. Base Current

