

2SC4744

Silicon NPN Triple Diffused
Character Display Horizontal Deflection Output

Feature

- High breakdown voltage
 $V_{CES} = 1500 \text{ V}$
- Built-in dampen diode type
- Isolated package; TO-3PFM

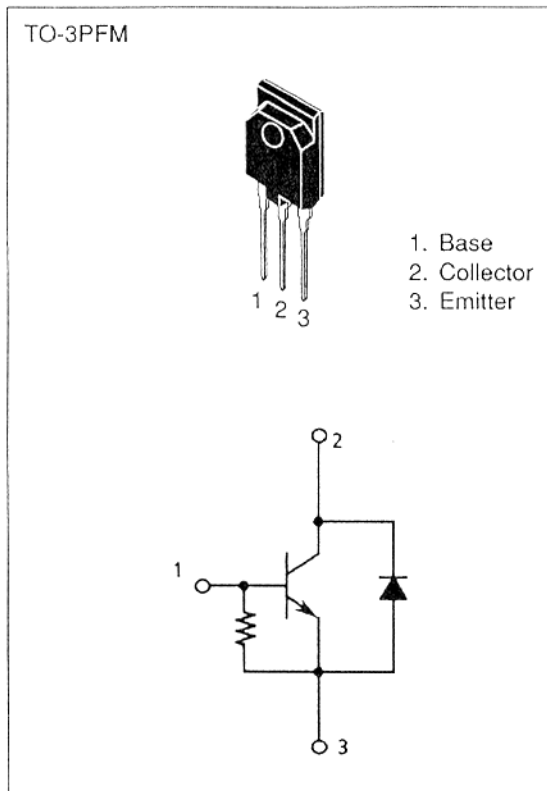
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Item	Symbol	Rating	Unit
Collector to emitter voltage	V_{CES}	1500	V
Emitter to base voltage	V_{EBO}	6	V
Collector current	I_C	6	A
Collector peak current	$i_{C(\text{peak})}$	7	A
Collector surge current	$i_{C(\text{surge})}$	16	A
Collector power dissipation	P_C^{*1}	50	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$
C to E diode forward current	I_D	7	A

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

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

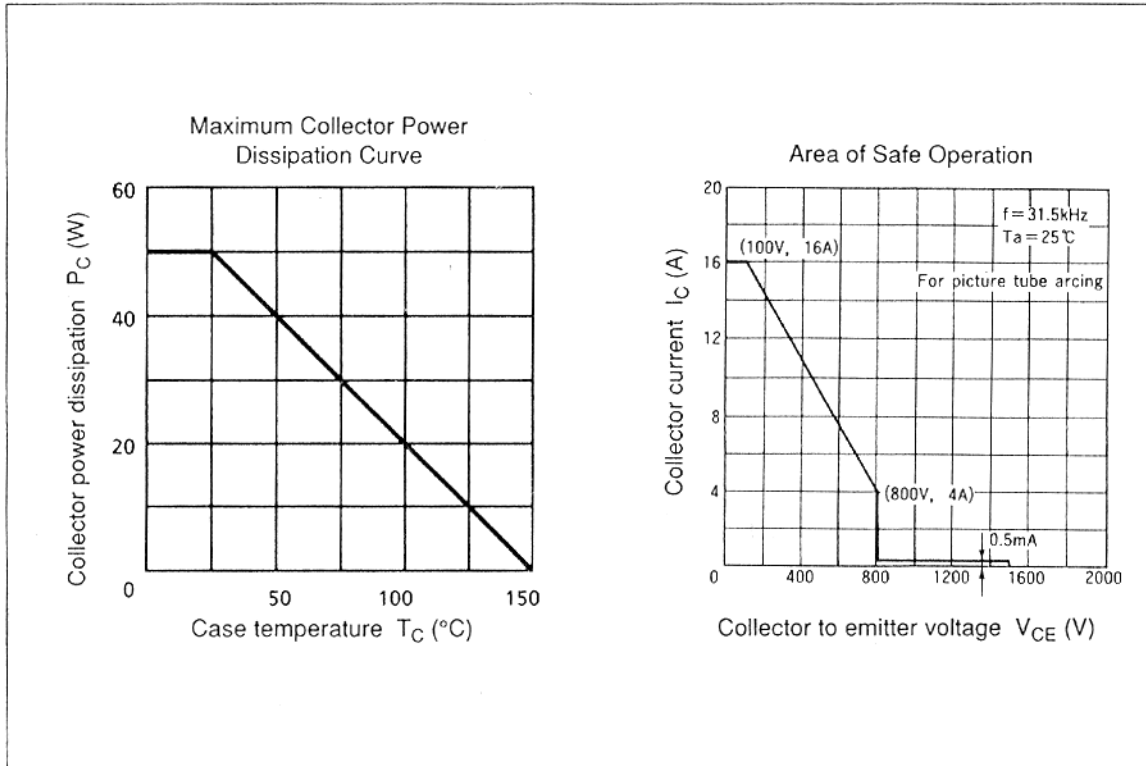
Item	Symbol	Min	Typ	Max	Unit	Test condition
Emitter to base breakdown voltage	$V_{(BR)EBO}$	6	—	—	V	$I_E = 400 \text{ mA}$, $I_C = 0$
Collector cutoff current	I_{CES}	—	—	500	μA	$V_{CE} = 1500 \text{ V}$, $R_{BE} = 0$
DC current transfer ratio	h_{FE}	—	—	25		$V_{CE} = 5 \text{ V}$, $I_C = 1 \text{ A}$
Collector to emitter saturation voltage	$V_{CE(\text{sat})}$	—	—	2.0	V	$I_C = 5 \text{ A}$, $I_B = 1.25 \text{ A}$
Base to emitter saturation voltage	$V_{BE(\text{sat})}$	—	—	1.5	V	$I_C = 5 \text{ A}$, $I_B = 1.25 \text{ A}$
C to E diode forward voltage	V_{ECF}	—	—	2.0	V	$I_F = 6 \text{ A}$



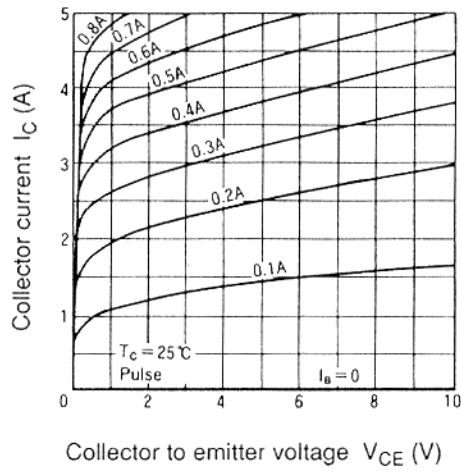
2SC4744

Electrical Characteristics (Ta = 25°C) (cont)

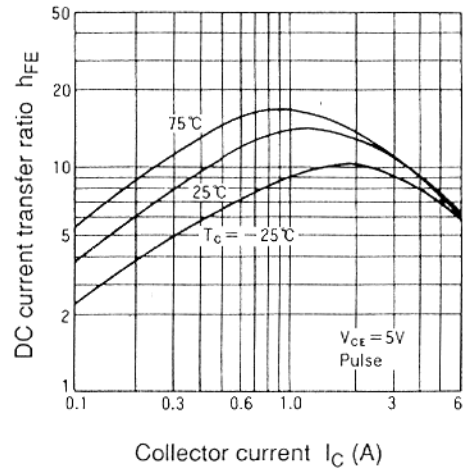
Item	Symbol	Min	Typ	Max	Unit	Test condition
Fall time	t_f	—	—	0.4	μs	$I_{CP} = 5 \text{ A}$, $I_{B1} = 1 \text{ A}$ $I_{B2} = -2 \text{ A}$



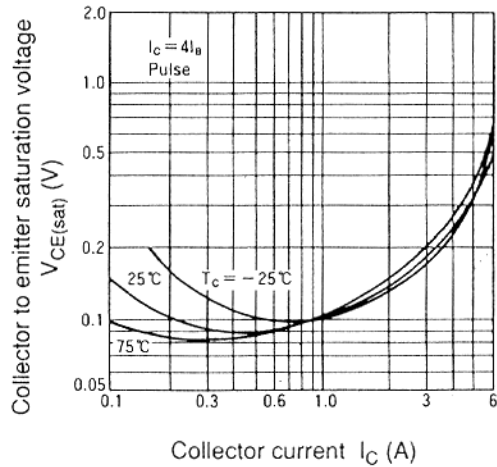
Typical Output Characteristics



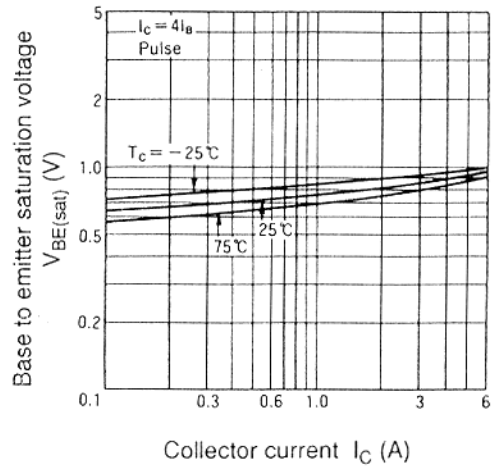
DC Current Transfer Ratio vs. Collector Current



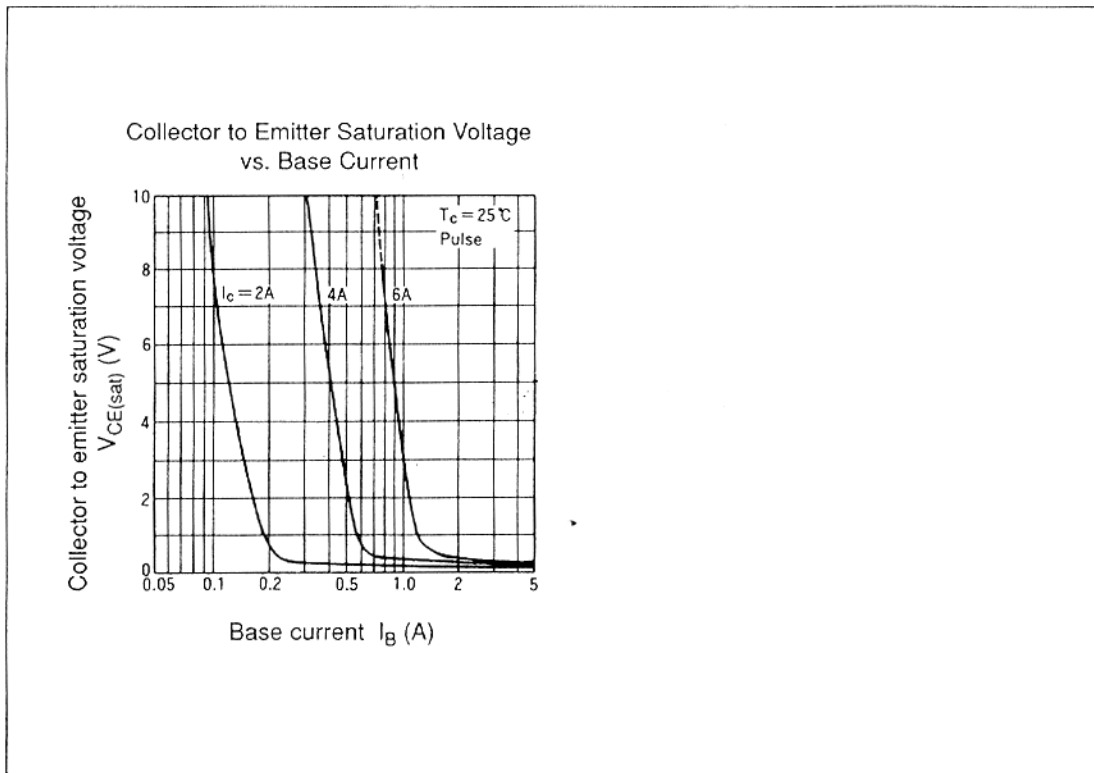
Collector to Emitter Saturation Voltage vs. Collector Current



Base to Emitter Saturation Voltage vs. Collector Current



2SC4744



This datasheet has been downloaded from:

www.DatasheetCatalog.com

Datasheets for electronic components.