Silicon NPN Triple Diffused

HITACHI

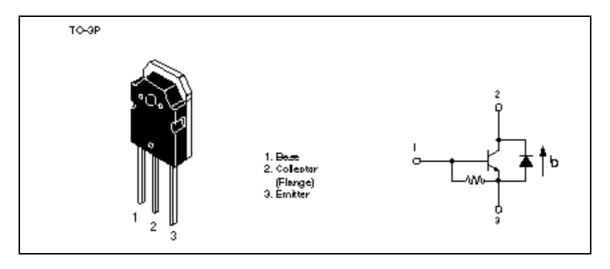
Application

CTV horizontal deflection output

Features

- High breakdown voltage $V_{CBO} = 1500 \text{ V}$
- Built-in damper diode type

Outline





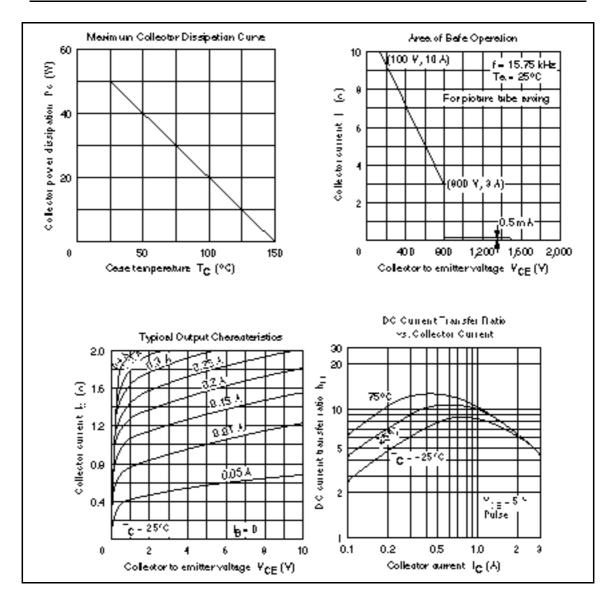
Absolute Maximum Ratings (Ta = 25° C)

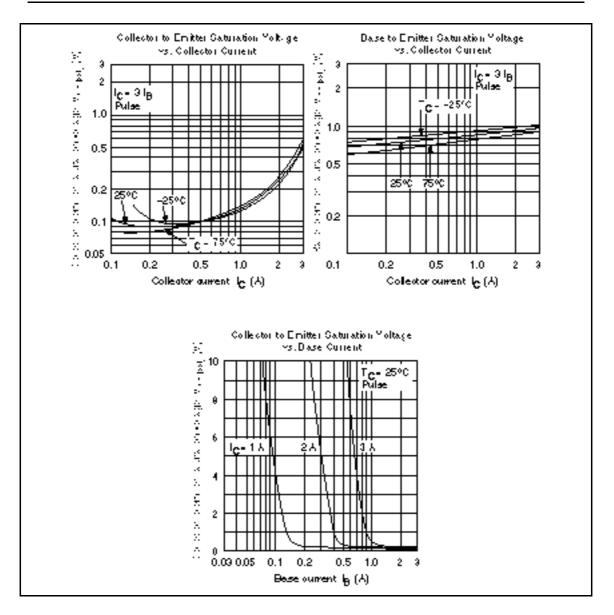
Item	Symbol	Ratings	Unit
Collector to emitter voltage	V _{CES}	1500	V
Emitter to base voltage	V _{EBO}	6	V
Collector current	Ι _c	3	А
Collector peak current	I _{C(peak)}	3.5	А
Collector surge current	I _{C(surge)}	10	А
Collector power dissipation	P _c *1	50	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C
C to E diode forward current	Ι _D	3.5	А

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

Electrical Characteristics (Ta = 25° C)

Item	Symbol	Min	Тур	Мах	Unit	Test conditions
Emitter to base breakdown voltage	$V_{(BR)EBO}$	6	—	—	V	$I_{\rm E} = 300$ mA, $I_{\rm C} = 0$
Collector cutoff current	I _{CES}	_	_	500	μA	$V_{ce} = 1500 \text{ V}, \text{ R}_{be} = 0$
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	—	—	5	V	$I_{\rm C} = 2.5 \text{ A}, I_{\rm B} = 0.8 \text{ A}$
Base to emitter saturation voltage	$V_{\text{BE(sat)}}$	_	_	1.5	V	$I_{\rm C} = 2.5 \text{ A}, I_{\rm B} = 0.8 \text{ A}$
C to E diode forward voltage	V_{ECF}	_	_	2.2	V	I _F = 3 A
Fall time	t _f	_	_	0.8	μs	I _{CP} = 2.75 A, I _{B1} = 0.6 A, f _H = 15.75 kHz





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