Silicon NPN Triple Diffused

HITACHI

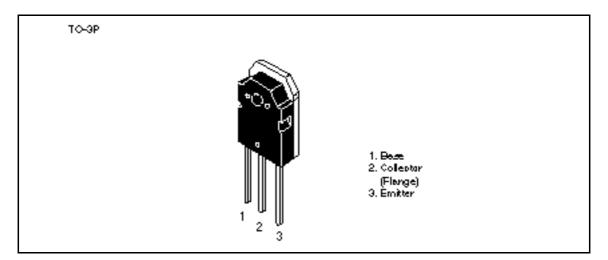
Application

CTV horizontal deflection output

Features

• High breakdown voltage $V_{CBO} = 1500 \text{ V}$

Outline





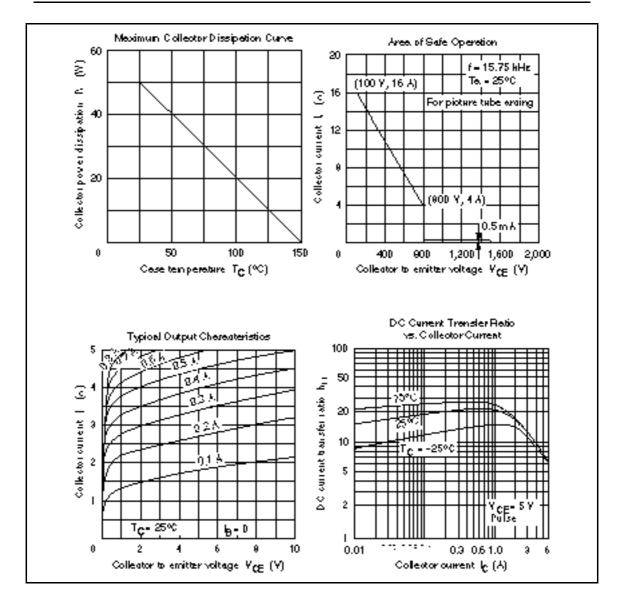
Absolute Maximum Ratings (Ta = 25° C)

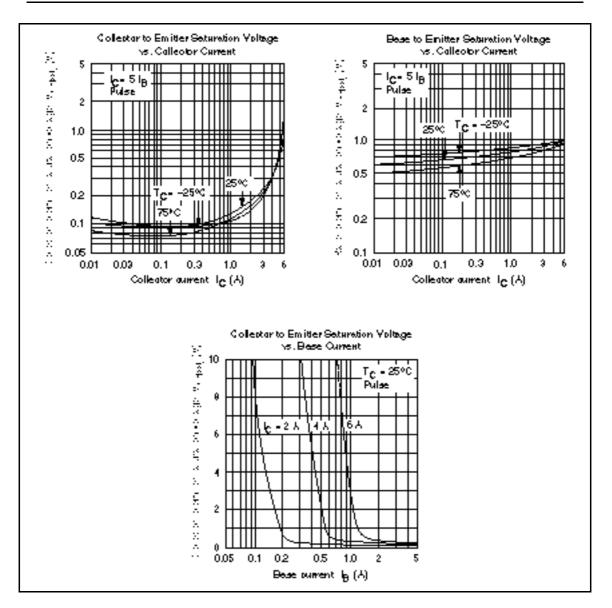
Item	Symbol	Ratings	Unit	
Collector to base voltage	V _{CBO}	1500	V	
Collector to emitter voltage	V _{CEO}	800	V	
Emitter to base voltage	V _{EBO}	6	V	
Collector current	Ι _c	6	А	
Collector peak current	I _{C(peak)}	7	А	
Collector surge current	I _{C(surge)}	16	А	
Collector power dissipation	P _c * ¹	50	W	
Junction temperature	Tj	150	°C	
Storage temperature	Tstg	-55 to +150	°C	

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

Electrical Characteristics (Ta = 25° C)

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	800	_	_	V	$I_c = 10$ mA, $R_{BE} =$
Emitter to base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	6	_	_	V	$I_{\rm E} = 10$ mA, $I_{\rm C} = 0$
Collector cutoff current	I _{CES}	_	_	500	μA	$V_{ce} = 1500 \text{ V}, \text{ R}_{be} = 0$
DC current transfer ratio	h_{FE}	_	_	30		$V_{ce} = 5 \text{ V}, \text{ I}_{c} = 1 \text{ A}$
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	—	—	5	V	I _c = 5 A, I _B = 1 A
Base to emitter saturation voltage	$V_{\text{BE(sat)}}$	—	—	1.5	V	I _c = 5 A, I _B = 1 A
Fall time	t _f		—	0.8	μs	I _{CP} = 5 A, I _{B1} = 1 A, f _H = 15.75 kHz





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