Silicon NPN Triple Diffused

HITACHI

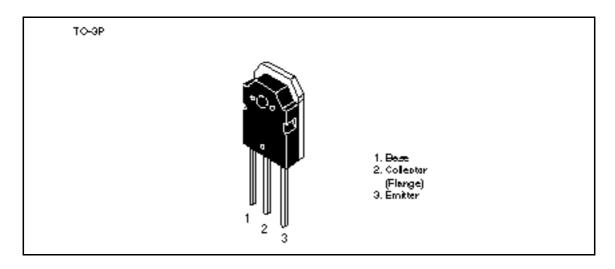
Application

CTV horizontal deflection output

Features

• High breakdown voltage $V_{\text{CBO}} = 1500 \; V \label{eq:CBO}$

Outline





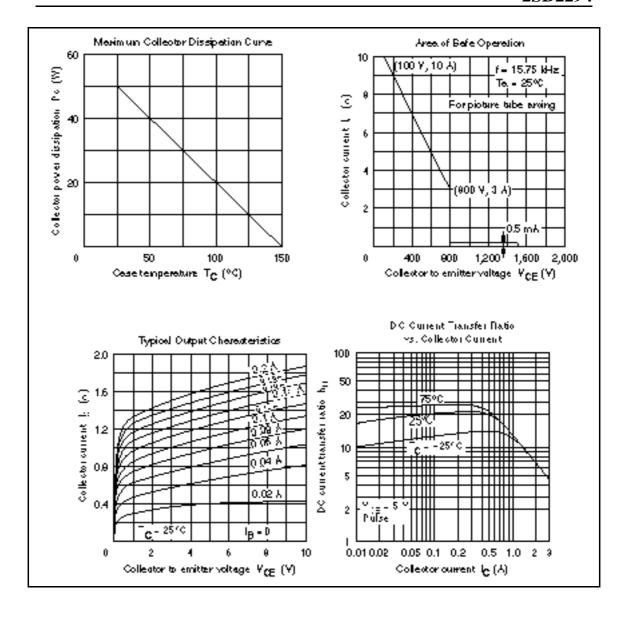
Absolute Maximum Ratings ($Ta = 25^{\circ}C$)

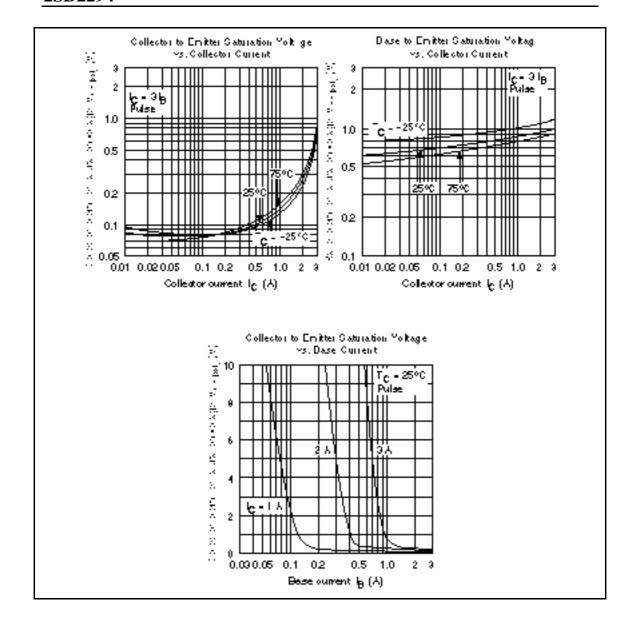
Symbol	Ratings	Unit
V_{CBO}	1500	V
V_{CEO}	800	V
V_{EBO}	6	V
I _c	3	А
I _{C(peak)}	3.5	А
I _{C(surge)}	10	А
P _c *1	50	W
Tj	150	°C
Tstg	-55 to +150	°C
	V_{CBO} V_{CEO} V_{EBO} I_{C} $I_{C(peak)}$ $I_{C(surge)}$ P_{C}^{*1}	V _{CBO} 1500 V _{CEO} 800 V _{EBO} 6 I _C 3 I _{C(peak)} 3.5 I _{C(surge)} 10 P _C *1 50 Tj 150

Note: 1. Value at $T_c = 25$ °C.

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

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	800	_	_	V	$I_{\rm C}$ = 10 mA, $R_{\rm BE}$ =
Emitter to base breakdown voltage	$V_{(BR)EBO}$	6	_	_	V	$I_E = 10 \text{ mA}, I_C = 0$
Collector cutoff current	I _{CES}	_	_	500	μΑ	$V_{CE} = 1500 \text{ V}, R_{BE} = 0$
DC current transfer ratio	h _{FE}	_	_	30		$V_{CE} = 5 \text{ V}, I_{C} = 0.3 \text{ A}$
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	$V_{BE(sat)}$	_	_	1.5	V	$I_{\rm C} = 2.5 \text{ A}, I_{\rm B} = 0.8 \text{ A}$
Fall time	t _f	_	_	1.0	μs	$I_{CP} = 2.75 \text{ A}, I_{B1} = 0.6 \text{ A},$ $f_{H} = 15.75 \text{ kHz}$





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