# 2SD2294

Silicon NPN Triple Diffused

# HITACHI

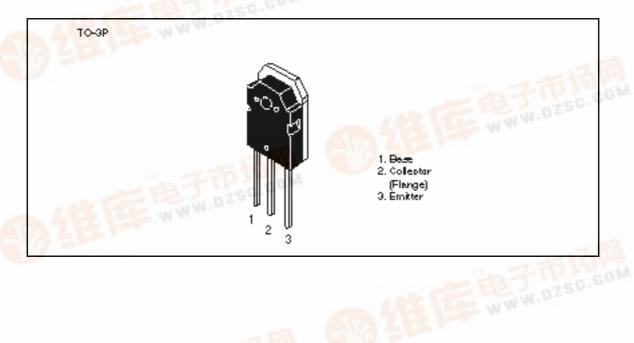
#### **Application**

CTV horizontal deflection output

#### **Features**

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

#### **Outline**





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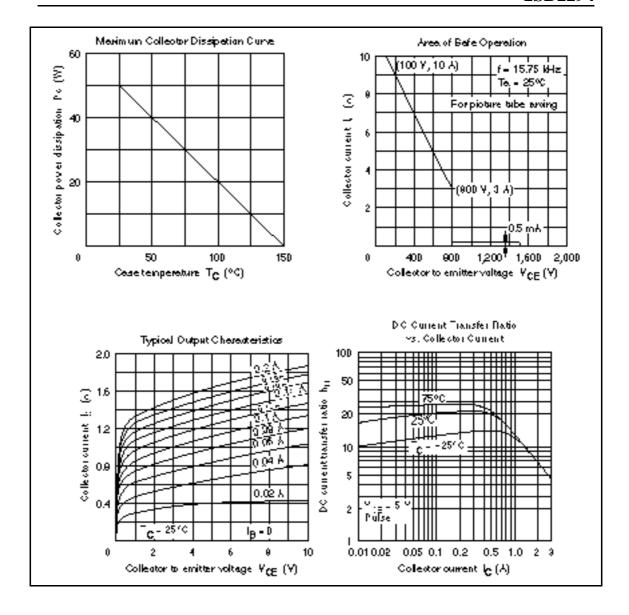
### **Absolute Maximum Ratings** ( $Ta = 25^{\circ}C$ )

Symbol	Ratings	Unit	
$V_{\text{CBO}}$	1500	V	
$V_{\text{CEO}}$	800	V	
$V_{EBO}$	6	V	
I <sub>c</sub>	3	А	
C(peak)	3.5	А	
I <sub>C(surge)</sub>	10	А	
P <sub>c</sub> *1	50	W	
Tj	150	°C	
Tstg	-55 to +150	°C	
	$V_{CBO}$ $V_{CEO}$ $V_{EBO}$ $I_{C}$ $I_{C(peak)}$ $I_{C(surge)}$ $P_{C}^{*1}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

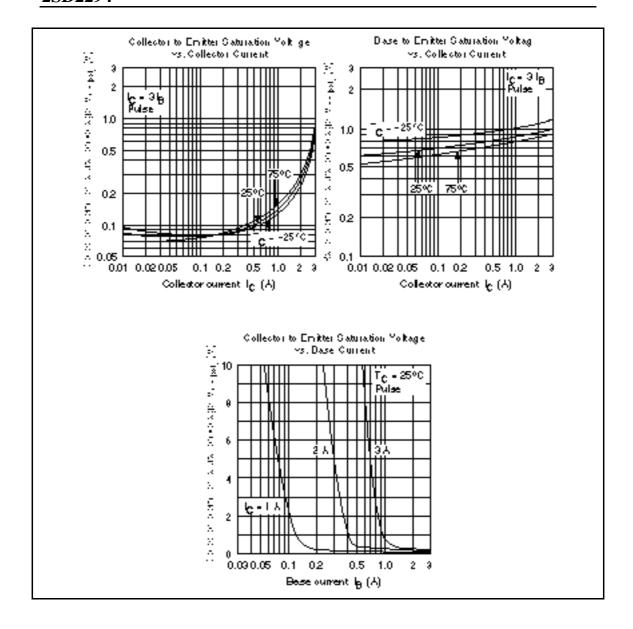
Note: 1. Value at  $T_c = 25$ °C.

## **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	$I_{\rm E} = 10 \text{ mA}, I_{\rm C} = 0$
Collector cutoff current	I <sub>CES</sub>	_	_	500	μΑ	$V_{CE} = 1500 \text{ V}, R_{BE} = 0$
DC current transfer ratio	h <sub>FE</sub>	_	_	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 <sub>f</sub>	_	_	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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