
2SC5068A

Silicon NPN Triple Diffused Planar

HITACHI

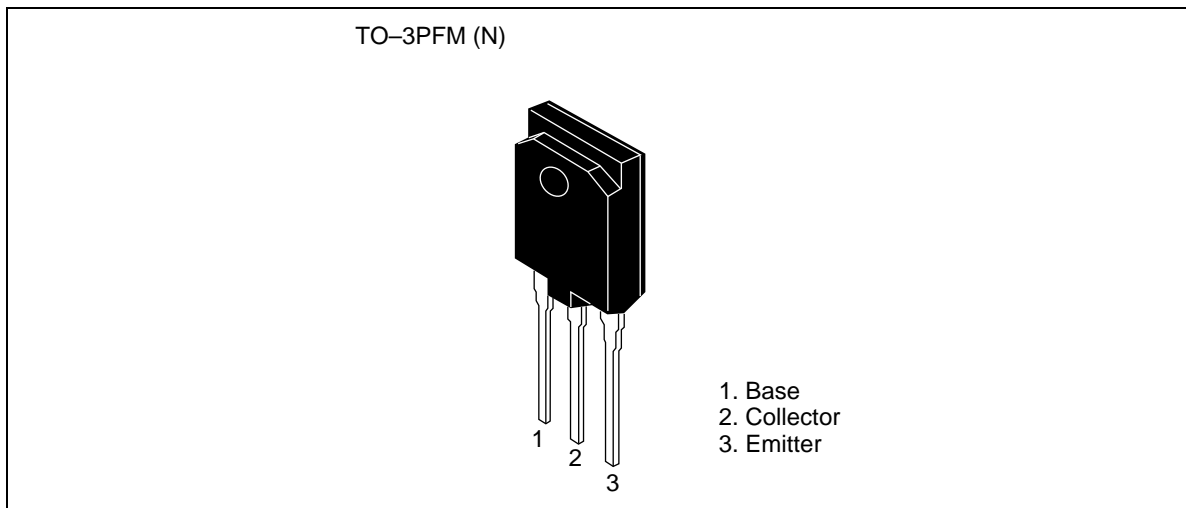
July 1993
Preliminary

Application

Character display horizontal deflection output

Features

- High breakdown voltage
 $V_{CB0} = 1500 \text{ V}$, $I_C = 12 \text{ A}$
- High speed switching
 $t_r = 0.2 \text{ } \mu\text{sec (typ)}$



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Absolute Maximum Ratings (Ta = 25°C)

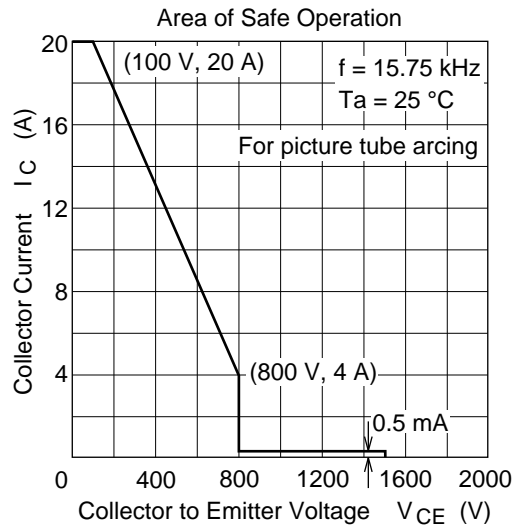
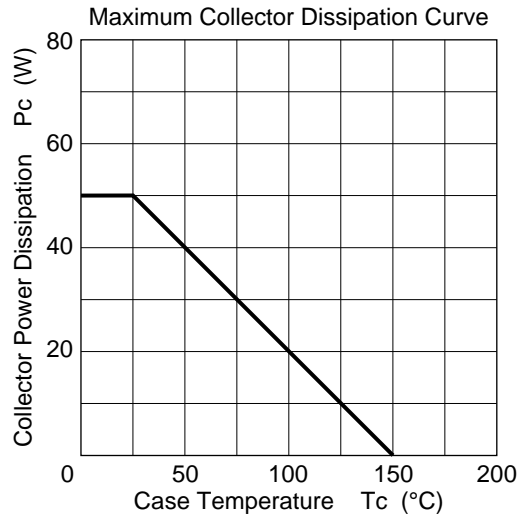
Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	1500	V
Collector to emitter voltage	V_{CEO}	800	V
Emitter to base voltage	V_{EBO}	6	V
Collector current	I_C	12	A
Collector surge current	ic(surge)	20	A
Collector power dissipation	PC*1	50	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

Note: 1. Value at Tc = 25°C

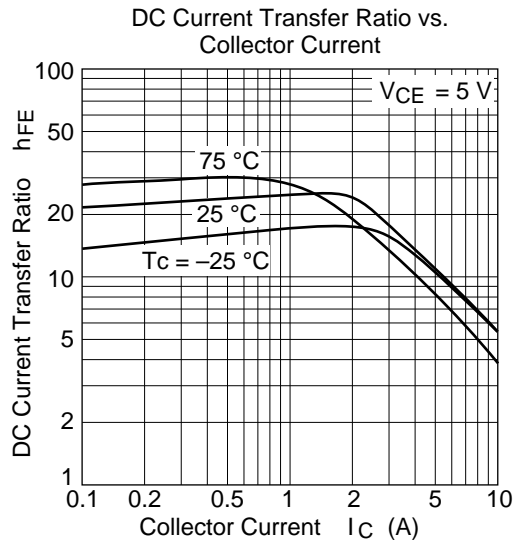
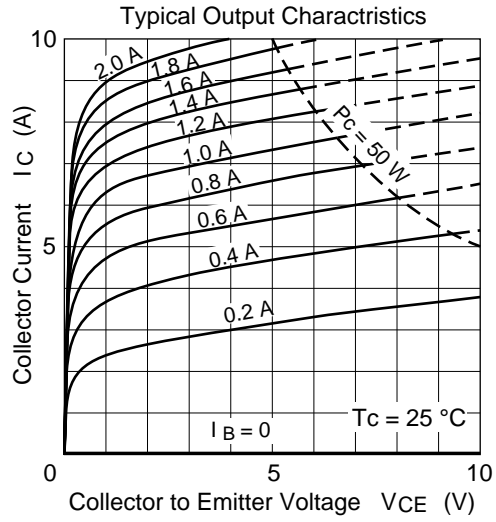
Electrical Characteristics (Ta = 25°C)

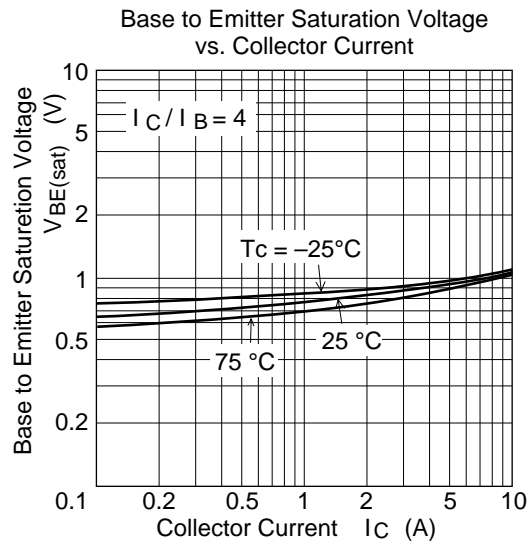
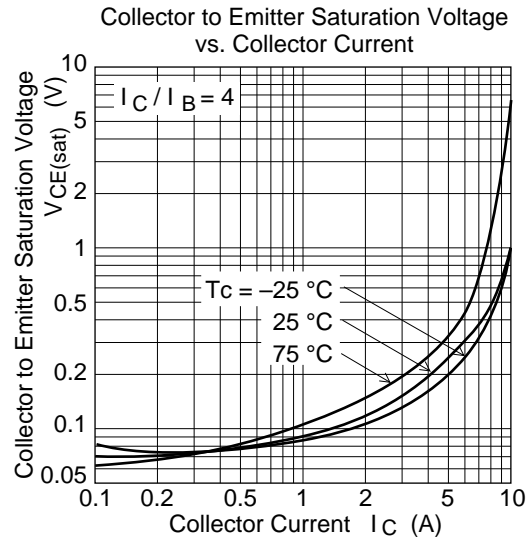
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	800	—	—	V	$I_C = 10 \text{ mA}$, $R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	6	—	—	V	$I_E = 10 \text{ mA}$, $I_C = 0$
Collector cutoff current	I_{CES}	—	—	500	μA	$V_{CE} = 1500 \text{ V}$, $R_{BE} = 0$
DC current transfer ratio	h_{FE}	—	—	38		$V_{CE} = 5 \text{ V}$, $I_C = 1 \text{ A}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	5	V	$I_C = 7 \text{ A}$, $I_B = 1.7 \text{ A}$
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	1.5	V	$I_C = 7 \text{ A}$, $I_B = 1.7 \text{ A}$
Fall time	t_f	—	0.2	0.4	μsec	$I_{CP} = 7 \text{ A}$, $I_{B1} = 1.7 \text{ A}$, c $f_H = 31.5 \text{ kHz}$

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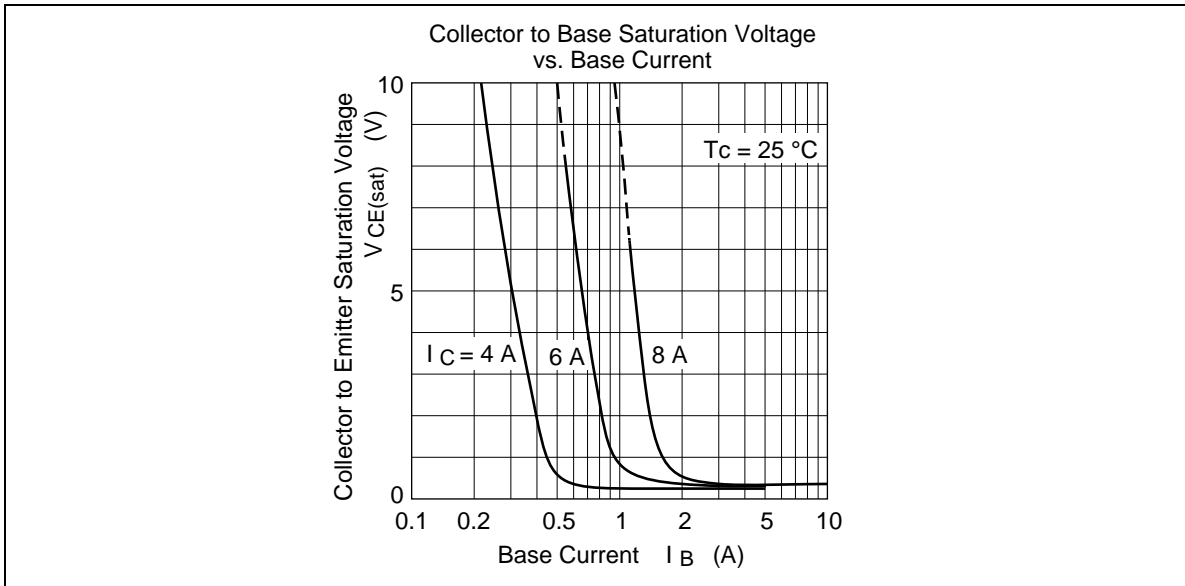


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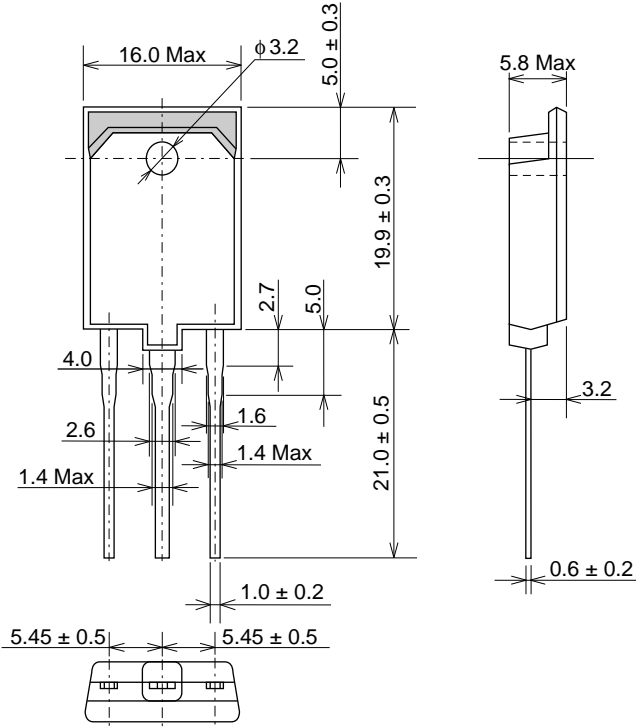


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Package Dimensions

Unit : mm

• HDPK



Hitachi Code	TO-3PFM
EIAJ	—
JEDEC	—