HITACHI

2SC5132A

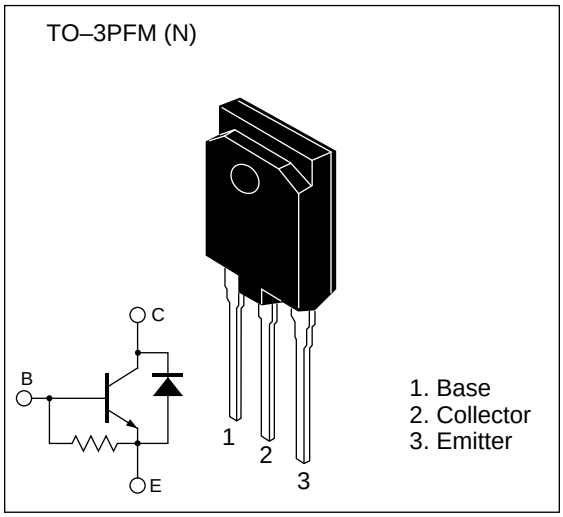
Silicon NPN Triple Diffused Planar

Application

Character display horizontal deflection output

Features

- High breakdown voltage
  V_{CES} = 1500 V, I_C = 8 A
- Built–in damper diode type
- Isolated package
  TO-3P•FM



Absolute Maximum Ratings (Ta = 25°C)

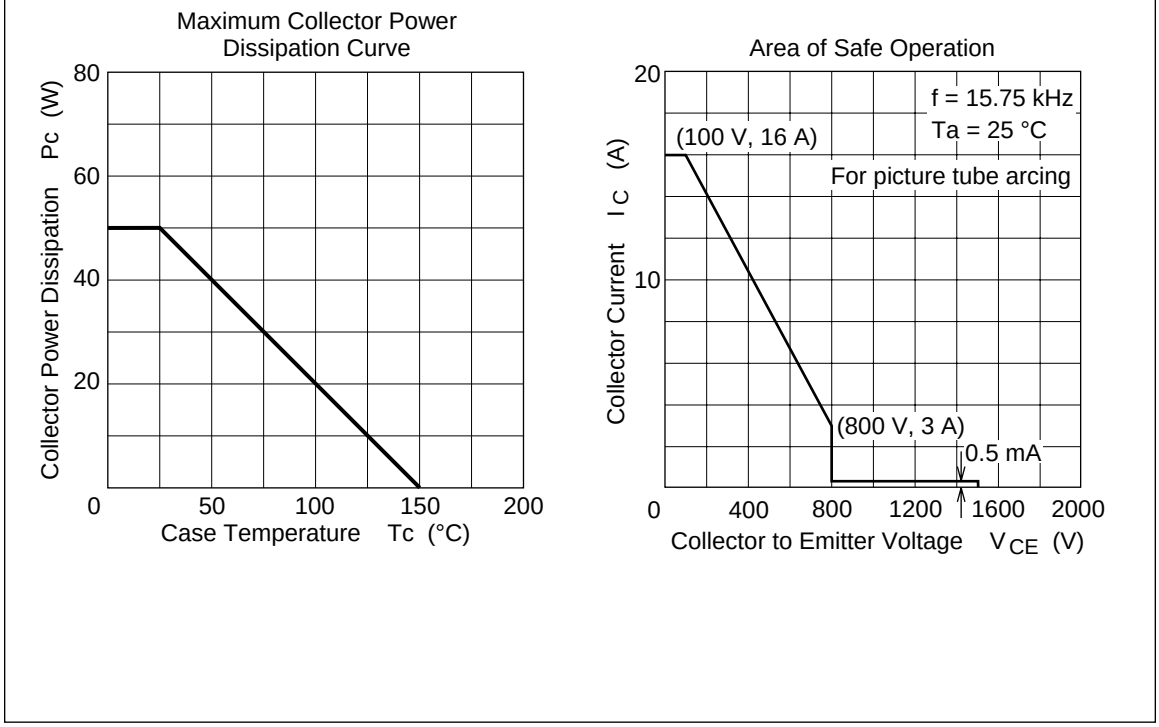
Item	Symbol	Ratings	Unit
Collector to emitter voltage	V_{CES}	1500	V
Emitter to base voltage	V_{EBO}	6	V
Collector current	I_C	8	A
Collector surge current	ic(surge)	16	A
Collector power dissipation	P_C*1	50	W
Junction temperature	T_j	150	°C
Storage temperature	Tstg	–55 to +150	°C
Diode current	I_D	6	A

Note: 1. Value at Tc = 25°C

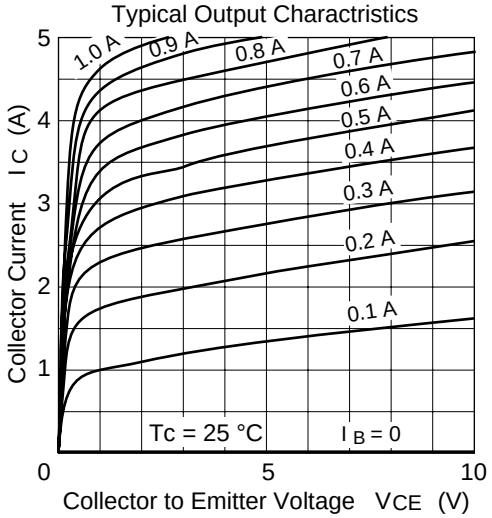
2SC5132A

Electrical Characteristics (Ta = 25°C)

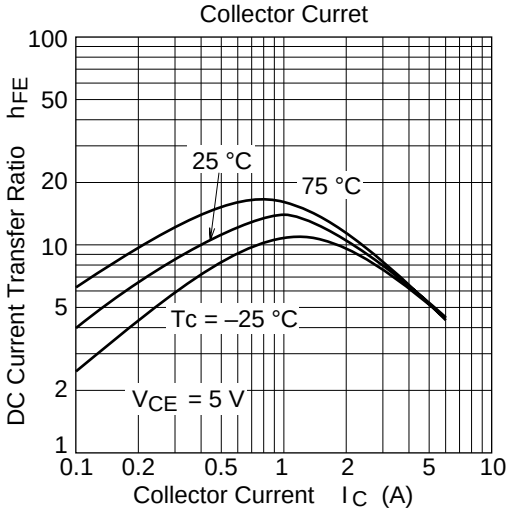
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Emitter to base breakdown voltage	$V_{(BR)EBO}$	6	—	—	V	I_E = 400 mA, I_C = 0
Collector cutoff current	I_{CES}	—	—	500	µA	V_{CE} = 1500 V, R_{BE} = 0
DC current transfer ratio	h_{FE}	—	—	25	—	V_{CE} = 5 V, I_C = 1 A
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	5	V	I_C = 5 A, I_B = 1.25 A
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	1.5	V	I_C = 5 A, I_B = 1.25 A
Forward voltage of damper diode	V_{ECF}	—	—	2.0	V	I_F = 6 A
Fall time	t_f	—	0.2	0.4	µsec	I_{CP} = 5 A, I_{B1} = 1 A, f_H = 31.5kHz



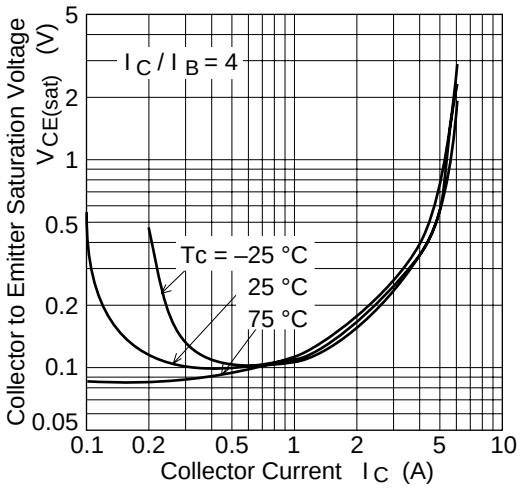
Typical Output Charactristics



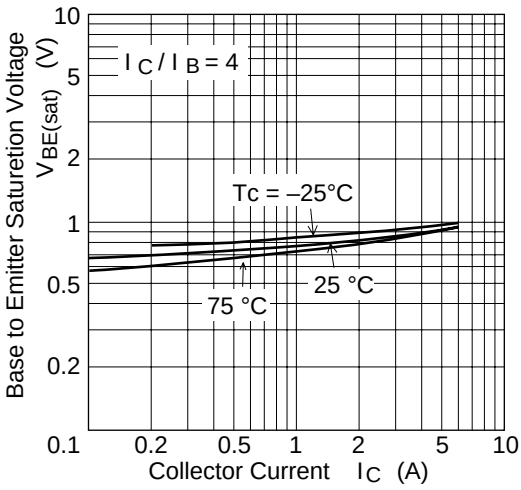
DC Current Transfer Ratio vs. Collector Curret



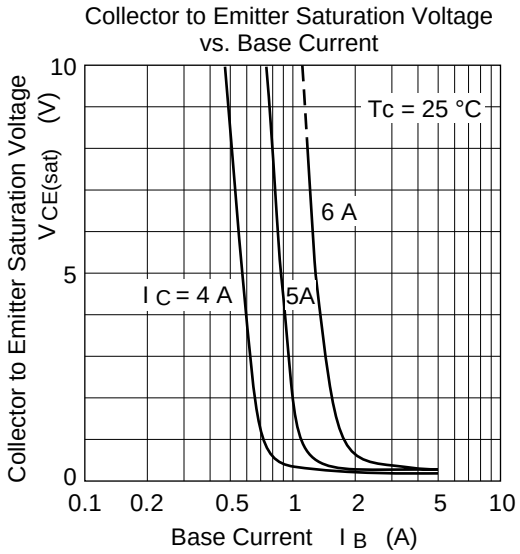
Collector to Emitter Saturation Voltage vs. Collector Current



Base to Emitter Saturation Voltage vs. Collector current



2SC5132A



Package Outline