2SC5461

Silicon NPN Triple Diffused
Character Display Horizntal Deflection Output

HITACHI

3rd. Edition
December 1997
Target Specification

Features

- High breakdown voltage
  V_{CBO} = 1500 V
- High speed switching
  t_f = 0.15 µsec (typ.) at f_H = 64kHz
- Isolated package
  TO–3PFM

Outline

TO–3PFM

1. Base
2. Collector
3. Emitter

Hitachi semiconductor

Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	1500	V
Collector to emitter voltage	V_{CEO}	700	V
Emitter to base voltage	V_{EBO}	6	V
Collector current	I_C	15	A
Collector peak current	$i_{c(peak)}$	30	A
Collector power dissipation	P_C Note1	50	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	–55 to +150	°C

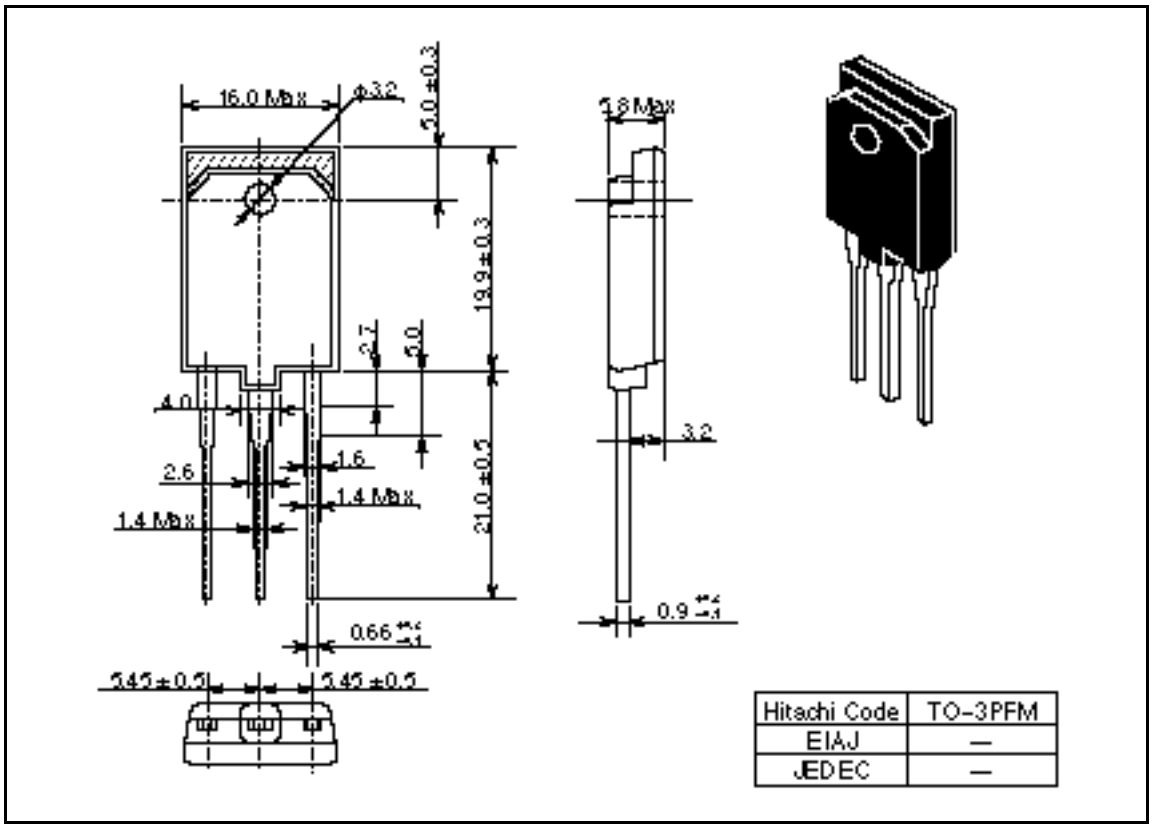
Note: 1. Value at Tc = 25°C

Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	700	—	—	V	I_C = 10mA, R_{BE} = ∞
Emitter to base breakdown voltage	$V_{(BR)EBO}$	6	—	—	V	I_E = 10mA, I_C = 0
Collector cutoff current	I_{CES}	—	—	500	µA	V_{CE} = 1500V, R_{BE} = 0
DC current transfer ratio	h_{FE1}	10	—	40		V_{CE} = 5 V, I_C = 1A
DC current transfer ratio	h_{FE2}	3.5	—	6.5		V_{CE} = 5 V, I_C = 8A
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	5	V	I_C = 10A, I_B = 3A
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	1.5	V	I_C = 10A, I_B = 3A
Fall time	t_f	—	0.2	0.4	µs	I_{CP} = 7A, I_{B1} = 2.8A f_H = 31.5kHz
Fall time	t_f	—	0.15	—	µs	I_{CP} = 7A, I_{B1} = 1.8A f_H = 64kHz

Package Dimensions

Unit: mm



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