# Technical Data
# TRANSISTOR

DISCRETE SEMICONDUCTOR INDUSTRIES

## maximum ratings

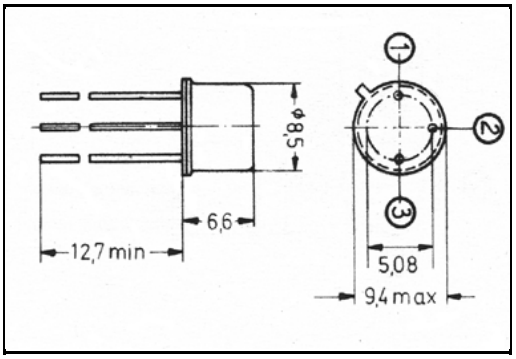
| | | | | |
|---|---|---|---|---|
| Voltage, Collector to Base (VCBO) | 65.0 | V | NO. | 2N3553 |
| Voltage, Collector to Emitter (VCE) | 40.0 | V | TYPE | NPN-RF |
| Voltage, Emitter to Base (VEBO) | 4.0 | V | | |
| Collector Current (IC) | 1.0 | A | | |
| Base Current (IB) | 0.1 | A | CASE | TO-39 |
| Max. Power Dissipation (PT) at TC = 25 °C | 7.0 | W | | |
| Max. Thermal Resistance (Rth J-C) | 25.0 | °C/W | | |
| Max. Junction Temperature (TJ) | 200.0 | °C | | |

## PERFORMANCE CHARACTERISTICS at $T_C$ = 25°C, unless otherwise noted

| NO. | SYMBOL | CONDITIONS | MIN. | MAX. | UNITS |
|---|---|---|---|---|---|
| 1. | BVCEO | IC = 200.0 mA (1) | 40.0 | - | V |
| 2. | BVEBO | IE = 100.0 µA | 4.0 | - | V |
| 3. | ICEO | VCE = 30.0 V | - | 100.0 | µA |
| 4. | ICEX | VCE = 65.0 V, VBE = 1.5 V | - | 1.0 | mA |
| 5. | IEBO | VEB = 4.0 V | - | 100.0 | µA |
| 6. | hFE | IC = 250.0 mA, VCE = 5.0 V (1) | 10.0 | 100.0 | - |
| 7. | VCE(SAT) | IC = 250.0 mA, IB = 50.0 mA (1) | - | 1.0 | V |
| 8. | fT | IC = 100.0 mA, VCE = 28.0 V, f = 100.0 MHz (2) | 500.0 | - | MHz |
| 9. | Cobo | VCB = 30.0 V, f = 1.0 MHz | - | 10.0 | pF |
| 10. | PIN | VCE = 28.0 V,Pout = 2.5 W, f = 175.0 MHz | - | 250.0 | mW |
| 11. | GPE | VCE = 28.0 V, Pout = 2.5 W, f = 175.0 MHz | 10.0 | - | dB |
| 12. | η | VCE = 28.0 V, Pout = 2.5 W, f = 175.0 MHz | 50.0 | - | % |
| 13. | | | | | |
| 14. | | | | | |
| 15. | | | | | |
| 16. | | | | | |
| 17. | | | | | |
| 18. | | | | | |
| 19. | | | | | |
| 20. | | | | | |

Notes (1)pulse-tested tp ≤ 300 µs, duty cycle ≤ 2 %
(2)typical value

DIMENSIONS in mm




Marking 2N3553
Customer GENERAL PURPOSE