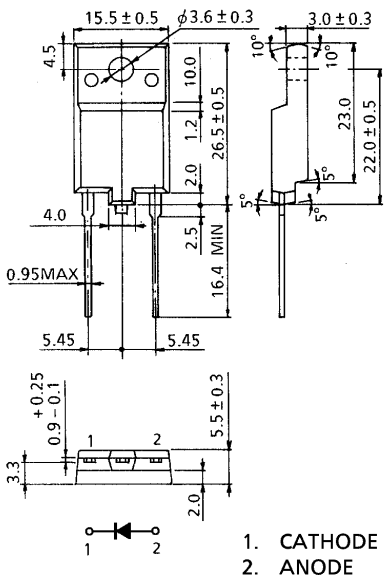
TOSHIBA RECTIFIER SILICON DIFFUSED TYPE

# 5THZ52

HORIZONTAL DEFLECTION OUTPUT FOR HIGH RESOLUTION DISPLAY, COLOR TV (DAMPER-diode)

Unit in mm

- Repetitive Peak Reverse Voltage : $V_{RRM}$ = 1500 V
- Average Forward Current : $I_{F(AV)}$ = 5 A
- Reverse-Recovery Time : $t_{rr}$ = 1.5 μs (Max.)
- High Reliability




| | |
|---|---|
| JEDEC | — |
| EIAJ | — |
| TOSHIBA | 3-16C1A |

Weight : 5.5 g (Typ.)

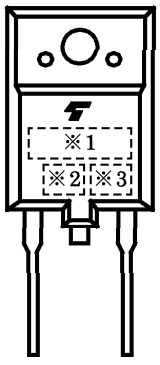
MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|---|---|---|
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | 1500 | V |
| Average Forward Current (Tc = 125°C) | $I_{F(AV)}$ | 5 | A |
| Peak One Cycle Surge Forward Current (Non-Repetitive) | $I_{FSM}$ | 50 (50 Hz) | A |
| | | 60 (60 Hz) | |
| Junction Temperature | $T_j$ | −40~150 | °C |
| Storage Temperature Range | $T_{stg}$ | −40~150 | °C |

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---|---|---|---|---|---|---|
| Peak Forward Voltage | $V_{FM}$ | $I_{FM}$ = 5 A | — | — | 1.5 | V |
| Repetitive Peak Reverse Current | $I_{RRM}$ | $V_{RRM}$ = 1500 V | — | — | 50 | μA |
| Reverse Recovery Time | $t_{rr}$ | $I_F$ = 0.1 A, $I_{DC}$ = 0.1 A | — | — | 1.5 | μs |
| Thermal Resistance | $R_{th(j-c)}$ | DC | — | — | 2.5 | °C / W |

MARKING




| | | |
|---|---|---|
| ※1 | TYPE | 5THZ52 |
| ※2 | Polarity Mark | ⊣◀ |
| ※3 | Lot Number<br>□□—Month (Starting from Alphabet A)<br>└—Year (Last Number of the Christian Era) | |

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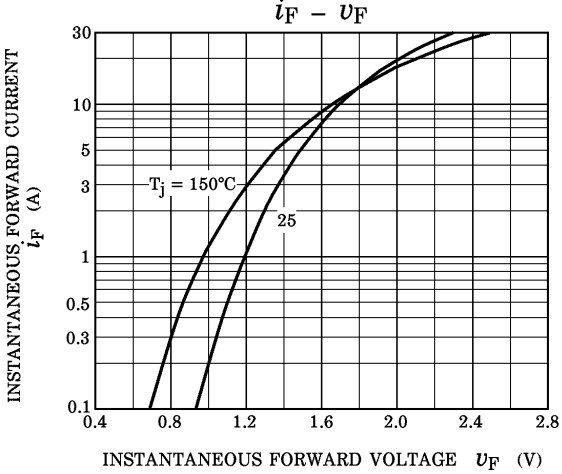
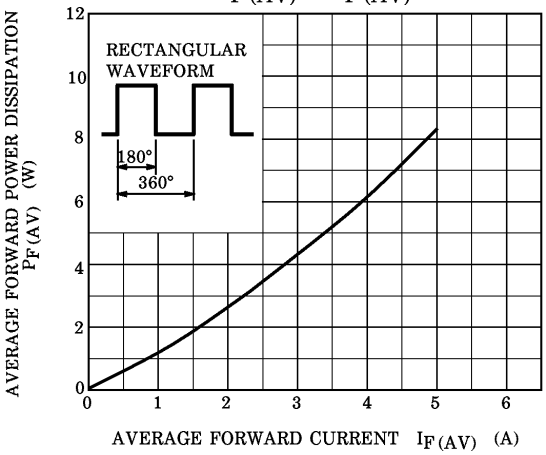
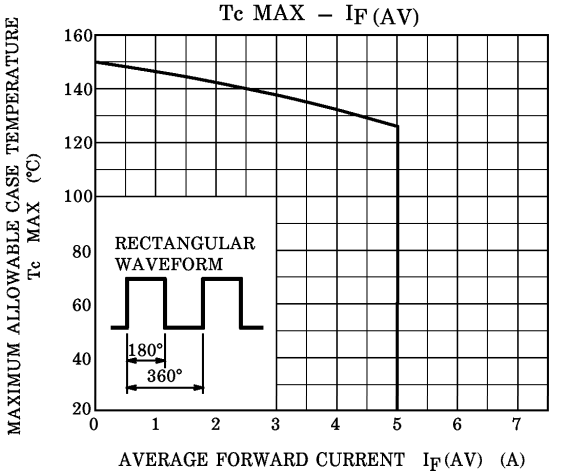
$i_F - v_F$



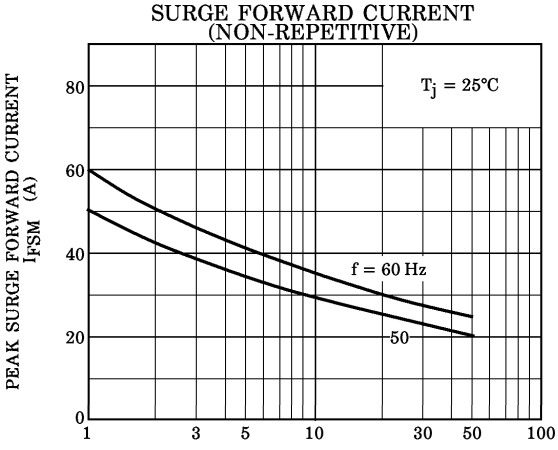

$P_{F(AV)} - I_{F(AV)}$



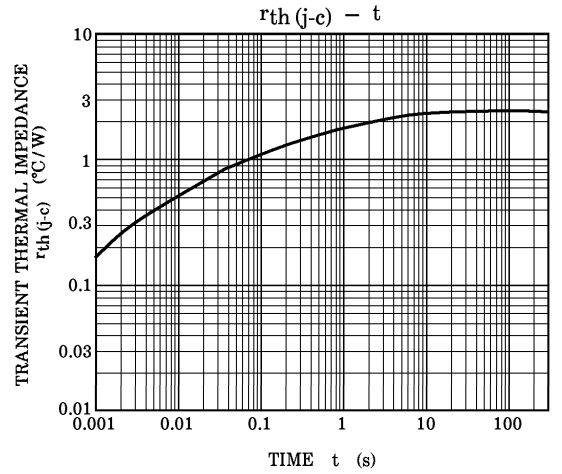

$T_C$ MAX $- I_{F(AV)}$




SURGE FORWARD CURRENT (NON-REPETITIVE)




$r_{th\,(j\text{-}c)} - t$




$C_j - V_R$ (TYPICAL)