TOSHIBA RECTIFIER MODULE SILICON DIFFUSED TYPE

# 20L6P45

THREE PHASE FULL WAVE BRIDGE APPLICATIONS

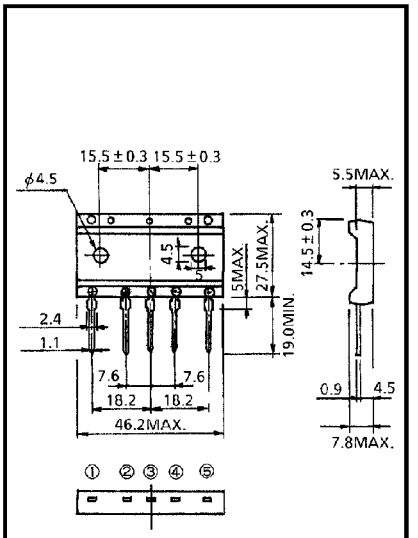
INVERTER EQUIPMENT FOR AC MOTOR CONTROL

CHOPPER EQUIPMENT FOR DC MOTOR CONTROL

DC SUPPLY FOR BATTERY

OTHER POWER CONVERSION EQUIPMENT

Unit in mm




| | |
|---|---|
| JEDEC | — |
| EIAJ | — |
| TOSHIBA | 12-46A1A |

Weight : 24g

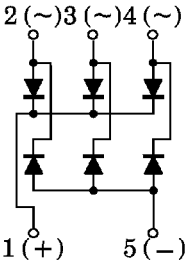
- Repetitive Peak Reverse Voltage : $V_{RRM}$ = 800V
- Average Output Rectified Current : $I_O$ = 20A
- Isolation Voltage : $V_{Isol}$ = 2000V AC 60s
- Single In-line Package

MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|---|---|---|
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | 800 | V |
| Average Output Rectified Current (Tc = 105°C) | $I_O$ | 20 | A |
| Peak One Cycle Surge Forward Current (Non-Repetitive) | $I_{FSM}$ | 300 (50Hz) | A |
| | | 330 (60Hz) | |
| Junction Temperature | $T_j$ | −40~150 | °C |
| Storage Temperature | $T_{stg}$ | −40~125 | °C |
| Screw Torque (Note 1) | — | 1.5 | N·m |
| Isolation Voltage (AC, t = 60s) | $V_{Isol}$ | 2000 | V |

Note 1 : Recommended torque 1.2 Nm

CONNECTION



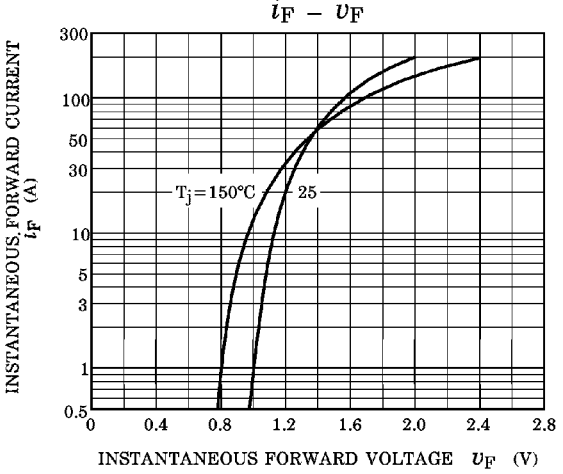

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | MAX. | UNIT |
|---|---|---|---|---|---|
| Repetitive Peak Reverse Current | $I_{RRM}$ (Note 2) | $V_{RRM}$ = 800V | — | 100 | μA |
| Peak Forward Voltage | $V_{FM}$ (Note 2) | $I_{FM}$ = 20A | — | 1.2 | V |
| Thermal Resistance | $R_{th\ (j-c)}$ | DC (Total) (Junction-Case) | — | 1.0 | °C / W |
| | $R_{th\ (j-a)}$ | Free Convection (Junction-Ambient) | — | 15 | °C / W |

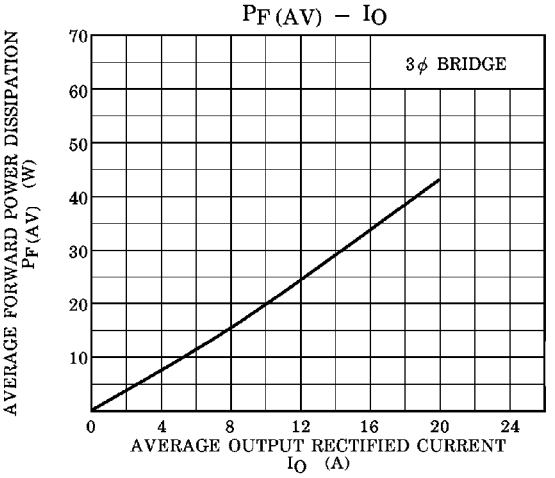
Note 2 : A value per rectifier unit.

961001EAA2

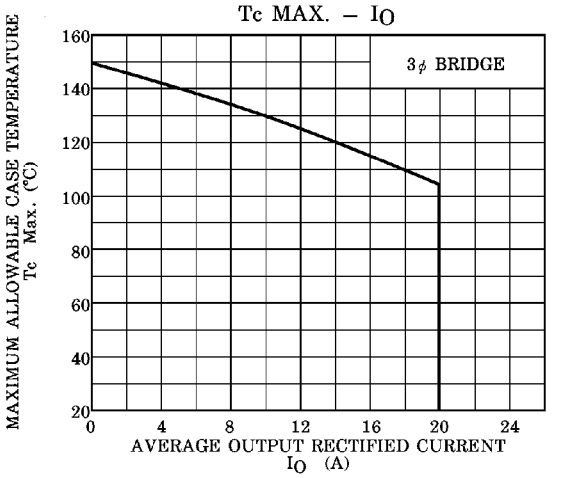
$i_F - v_F$



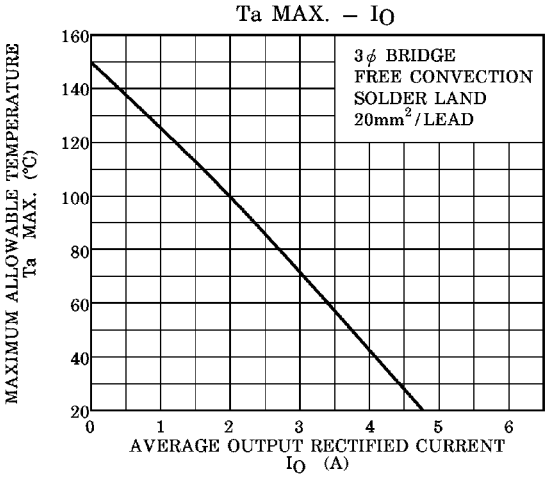

$P_{F(AV)} - I_O$



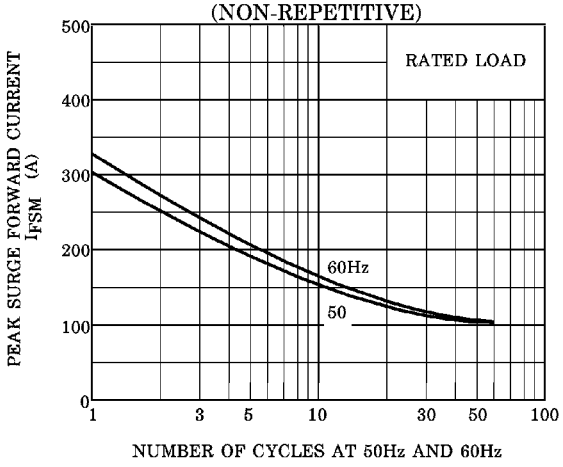

Tc MAX. – $I_O$



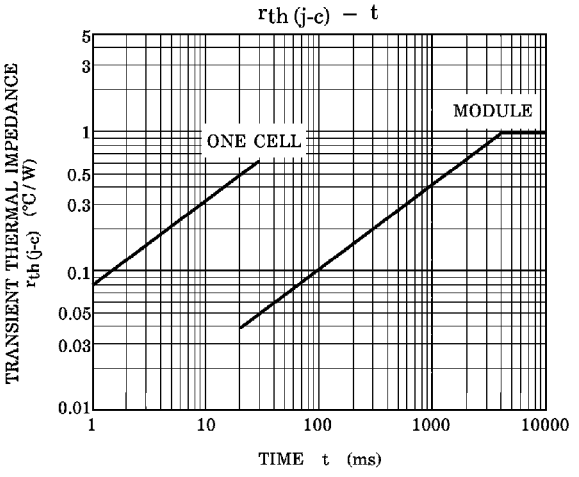

Ta MAX. – $I_O$




SURGE FORWARD CURRENT
(NON-REPETITIVE)




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

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