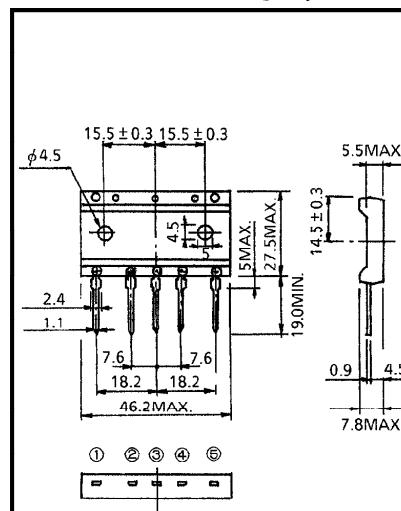


TOSHIBA RECTIFIER MODULE SILICON DIFFUSED TYPE

30Q6P45, 30U6P45

- 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



- Repetitive Peak Reverse Voltage : $V_{RRM}=1200、1600V$
- Average Output Rectified Current : $I_O=30A$
- Isolation Voltage : $V_{Isol}=2500V$ AC 60s
- Single In-line Package

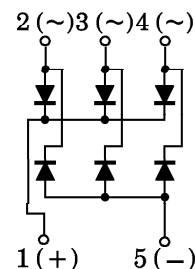
MAXIMUM RATINGS ($T_a = 25^\circ C$)

| CHARACTERISTIC | | SYMBOL | RATING | UNIT |
|---|---------|------------|------------|------|
| Repetitive Peak Reverse Voltage | 30Q6P45 | V_{RRM} | 1200 | V |
| | 30U6P45 | | 1600 | |
| Average Output Rectified Current | | I_O | 30 | 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 | Nm |
| Isolation Voltage (AC, t=60s) | | V_{Isol} | 2500 | V |

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

Weight : 24g

CONNECTION



Note 1 : Recommended torque 1.2Nm

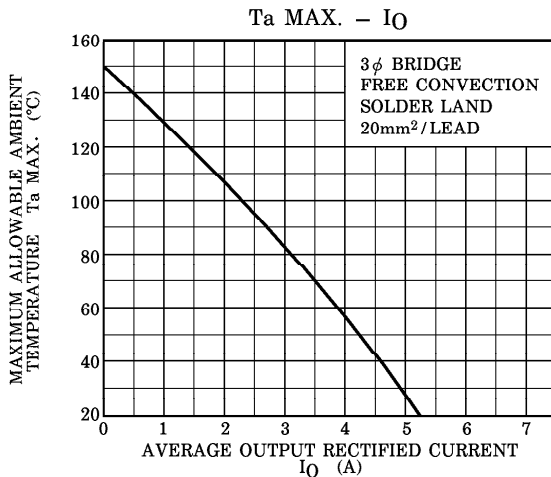
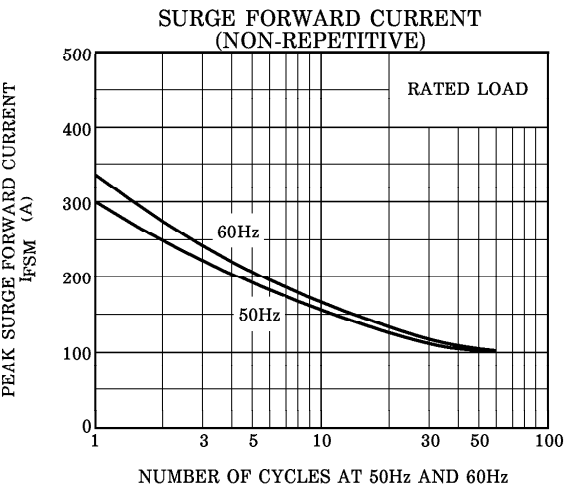
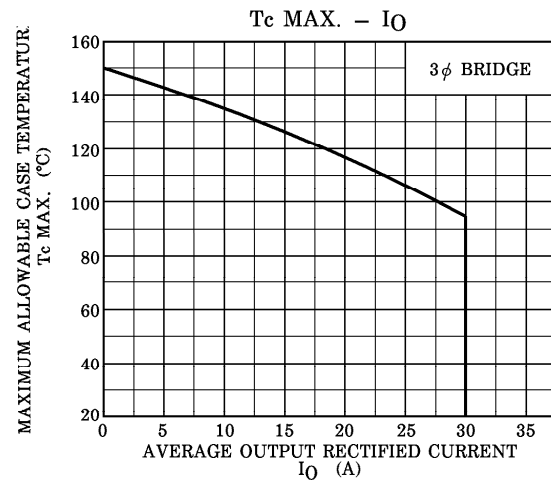
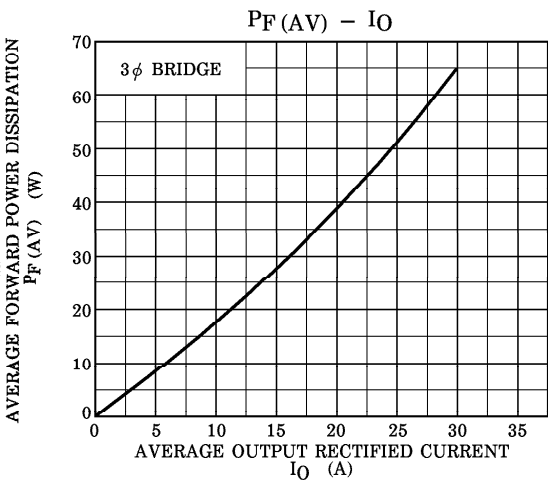
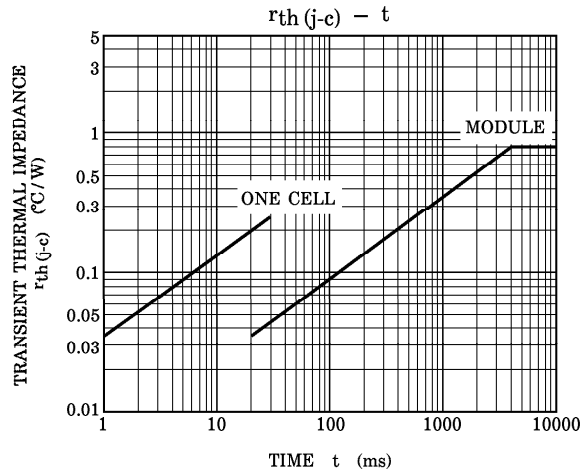
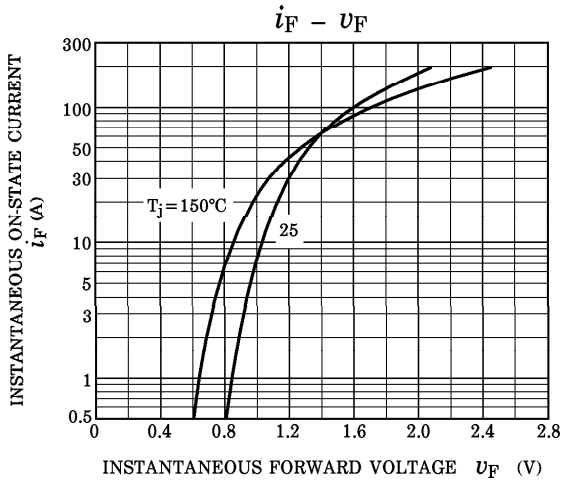
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | MAX. | UNIT |
|---------------------------------|-----------------------|------------------------------------|------|------|---------|
| Repetitive Peak Reverse Current | I_{RRM} (Note 2) | $V_{RRM} = \text{Rated}$ | — | 100 | μA |
| Peak Forward Voltage | V_{FM} (Note 2) | $I_{FM} = 30A$ | — | 1.3 | V |
| Thermal Resistance | $R_{th(j-c)}$ | DC (Total) (Junction-Case) | — | 0.8 | °C / W |
| | $R_{th(j-a)}$ | Free Convection (Junction-Ambient) | — | 15 | |

Note 2 : A value per rectifier unit.

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