

TOSHIBA HIGH EFFICIENCY DIODE STACK (HED) SILICON EPITAXIAL TYPE

16DL2CZ47A, 16FL2CZ47A

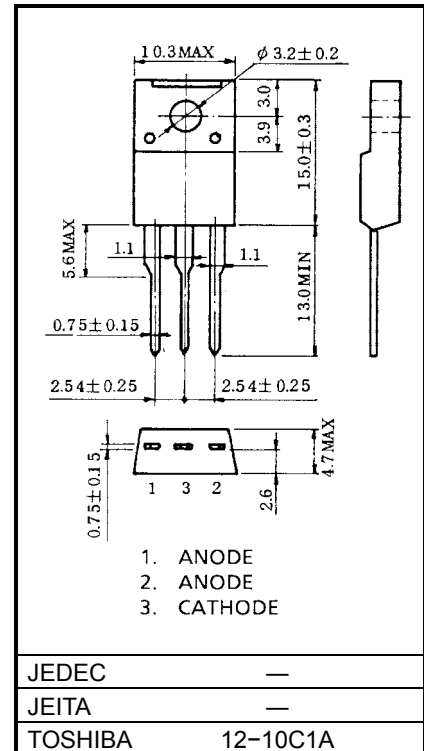
SWITCHING MODE POWER SUPPLY APPLICATION
CONVERTER & CHOPPER APPLICATION

Unit: mm

- Repetitive Peak Reverse Voltage : $V_{RRM} = 200, 300V$
- Average Output Rectified Current : $I_O = 16A$
- Ultra Fast Reverse-Recovery Time : $t_{rr} = 35ns$ (Max)
- Low Switching Losses and Output Noise.

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

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|------------|-----------|------------|
| Repetitive Peak Reverse Voltage | 16DL2CZ47A | 200 | V |
| | 16FL2CZ47A | 100 | |
| Average Output Rectified Current (Full Sine Waveform) | I_O | 16 | A |
| Peak One Cycle Surge Forward Current (Non-Repetitive) | I_{FSM} | 80 (50Hz) | A |
| | | 88 (60Hz) | |
| Junction Temperature | T_j | -40~150 | $^\circ C$ |
| Storage Temperature Range | T_{stg} | -40~150 | $^\circ C$ |
| Screw Torque | — | 0.6 | N·m |



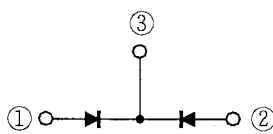
Weight: 2.0g

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

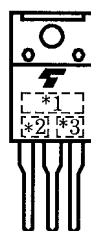
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN | TYP. | MAX | UNIT |
|--|---------------|----------------------------------|-----|------|------|--------------|
| Peak Forward Voltage (Note 1) | 16DL2CZ47A | $I_F = 8A$ | — | — | 0.98 | V |
| | 16FL2CZ47A | | — | — | 1.3 | |
| Repetitive Peak Reverse Current (Note 1) | I_{RRM} | $V_{RRM} = \text{Rated}$ | — | — | 50 | μA |
| Reverse Recovery Time (Note 1) | t_{rr} | $I_F = 2.0A, di/dt = -50A/\mu s$ | — | — | 35 | ns |
| Forward Recovery Time (Note 1) | t_{fr} | $I_F = 1.0A$ | — | — | 100 | ns |
| Thermal Resistance | $R_{th(j-c)}$ | DC Total, Junction to Case | — | — | 3.3 | $^\circ C/W$ |

Note 1: A value of one cell.

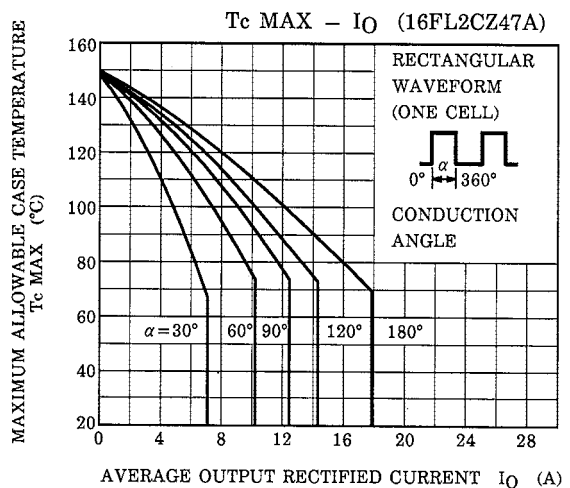
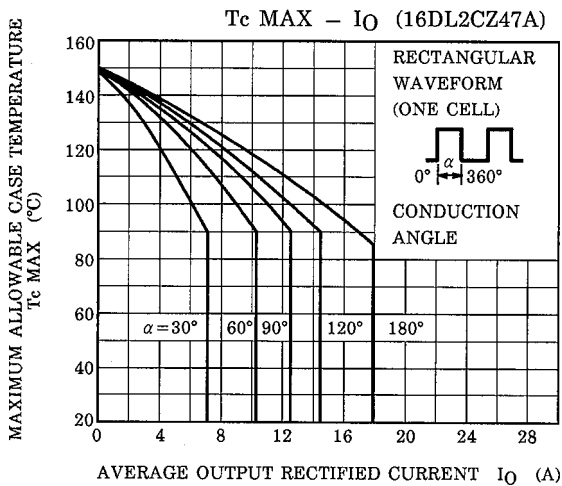
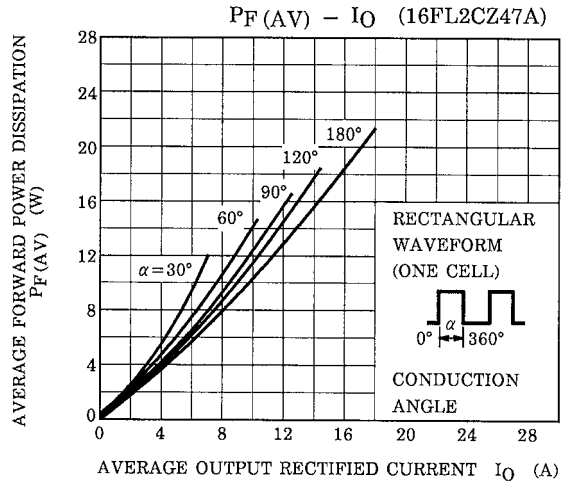
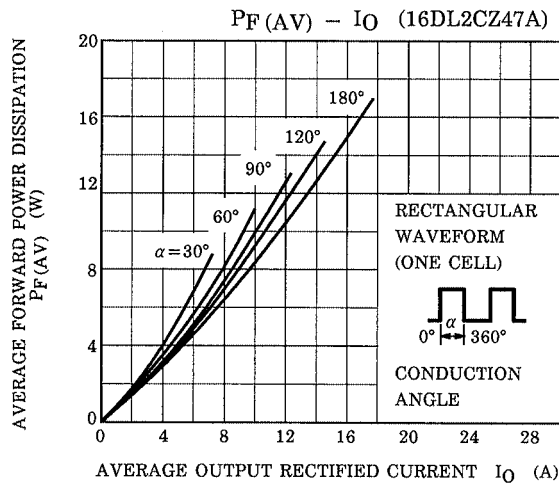
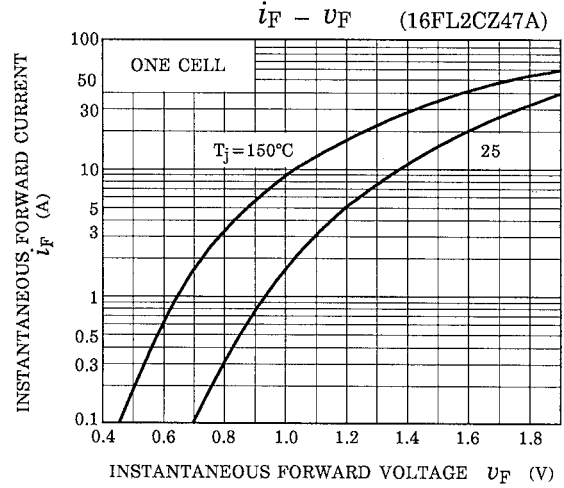
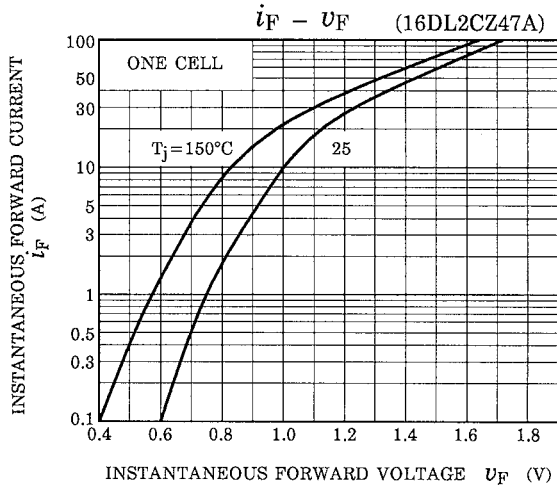
POLARITY

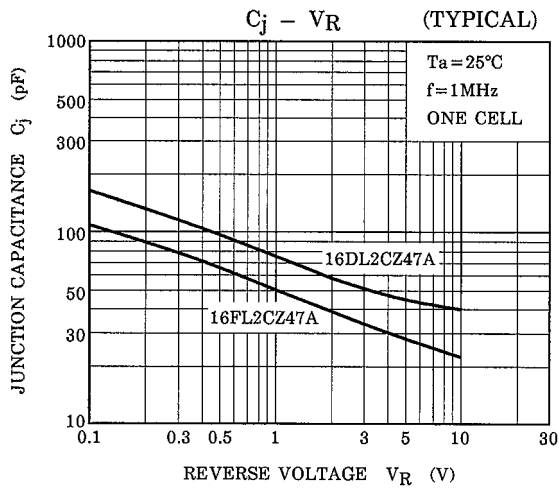
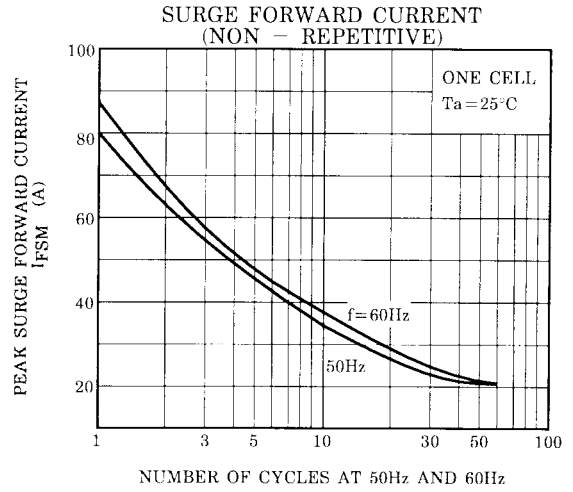
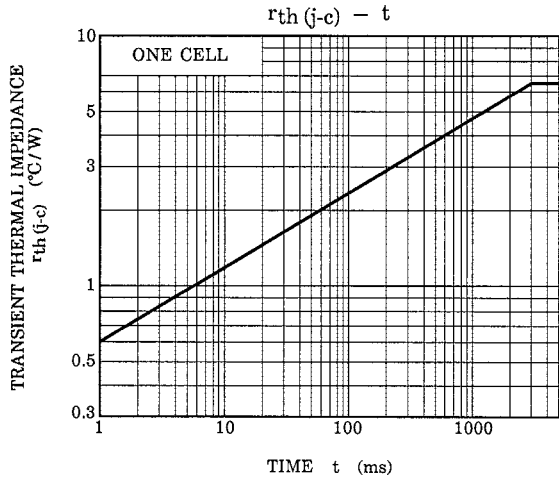


MARKING



| | | | | |
|-----|--|---------|------|------------|
| * 1 | MARK | 16DL2CZ | TYPE | 16DL2CZ47A |
| | | 16FL2CZ | | 16FL2CZ47A |
| * 2 | A | | | |
| * 3 | Lot Number | | | |
| | □□ -Month (Starting from Alphabet A) | | | |
| | —Year (Last Number of the Christian Era) | | | |





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000707EAA

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