

TOSHIBA HIGH EFFICIENCY DIODE STACK (HED) SILICON EPITAXIAL TYPE

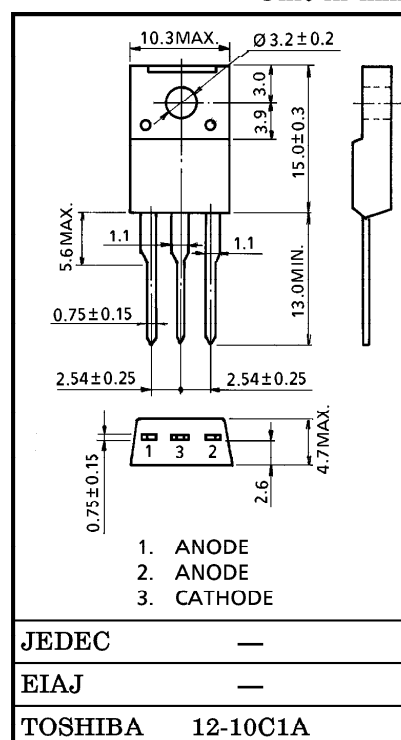
**10DL2CZ47A, 10FL2CZ47A, 10GL2CZ47A**SWITCHING TYPE POWER SUPPLY APPLICATION  
CONVERTER & CHOPPER APPLICATION

Unit in mm

- Repetitive Peak Reverse Voltage :  $V_{RRM}=200, 300, 400V$
- Average Output Rectified Current :  $I_O=10A$
- Ultra Fast Reverse-Recovery Time :  $t_{rr}=35ns$  (Max.)
- Low Switching Losses and Output Noise.

## MAXIMUM RATINGS

| CHARACTERISTIC                                   | SYMBOL     | RATING    | UNIT |
|--------------------------------------------------|------------|-----------|------|
| Repetitive Peak Reverse Voltage                  | 10DL2CZ47A | 200       | V    |
|                                                  | 10FL2CZ47A | 300       |      |
|                                                  | 10GL2CZ47A | 400       |      |
| Average Output Rectified Current                 | $I_O$      | 10        | A    |
| Peak One Cycle Surge Forward Current (Sine Wave) | $I_{FSM}$  | 50 (50Hz) | A    |
|                                                  |            | 55 (60Hz) |      |
| Junction Temperature                             | $T_j$      | -40~150   | °C   |
| Storage Temperature Range                        | $T_{stg}$  | -40~150   | °C   |
| Screw Torque                                     | —          | 0.6       | N·m  |

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

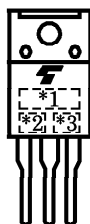
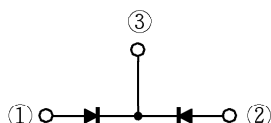
Weight : 2.0g

| CHARACTERISTIC                           | SYMBOL        | TEST CONDITION               | MIN. | TYP. | MAX. | UNIT    |
|------------------------------------------|---------------|------------------------------|------|------|------|---------|
| Peak Forward Voltage (Note 1)            | 10DL2CZ47A    | $I_{FM}=5A$                  | —    | —    | 0.98 | V       |
|                                          | 10FL2CZ47A    |                              | —    | —    | 1.3  |         |
|                                          | 10GL2CZ47A    |                              | —    | —    | 1.8  |         |
| Repetitive Peak Reverse Current (Note 1) | 10DL2CZ47A    | $V_{RRM}=\text{Rated}$       | —    | —    | 10   | $\mu A$ |
|                                          | 10FL2CZ47A    |                              | —    | —    | 10   |         |
|                                          | 10GL2CZ47A    |                              | —    | —    | 50   |         |
| Reverse Recovery Time (Note 1)           | $t_{rr}$      | $I_F=2A, di/dt = -20A/\mu s$ | —    | —    | 35   | ns      |
| Forward Recovery Time (Note 1)           | $t_{fr}$      | $I_F=1A$                     | —    | —    | 100  | ns      |
| Thermal Resistance                       | $R_{th(j-c)}$ | DC Total, Junction to Case   | —    | —    | 3.6  | °C/W    |

(Note 1) A value of one cell.

## POLARITY

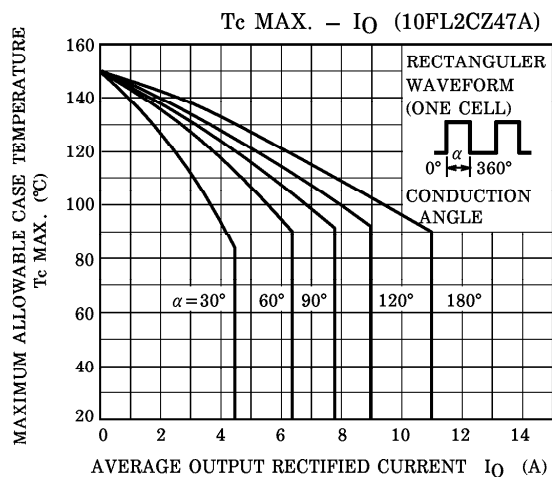
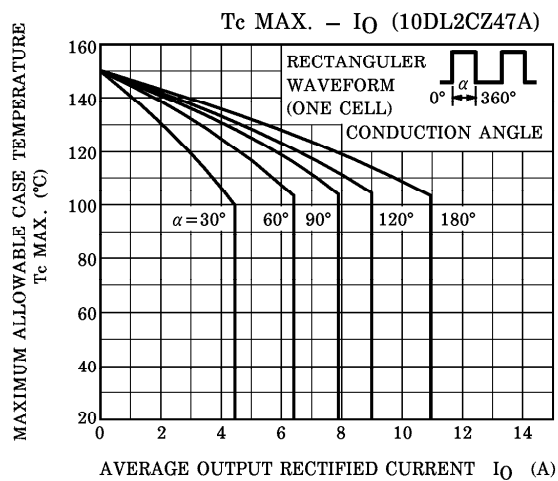
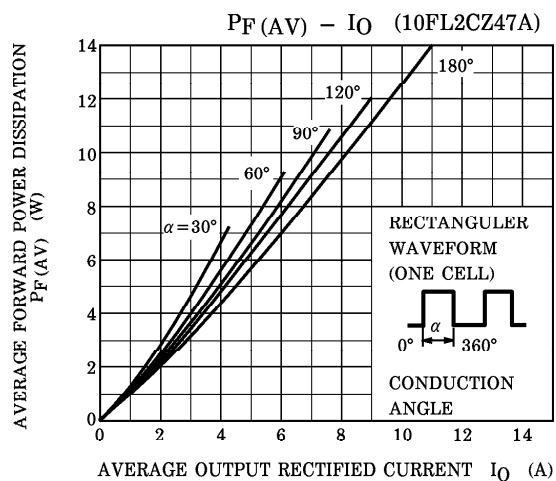
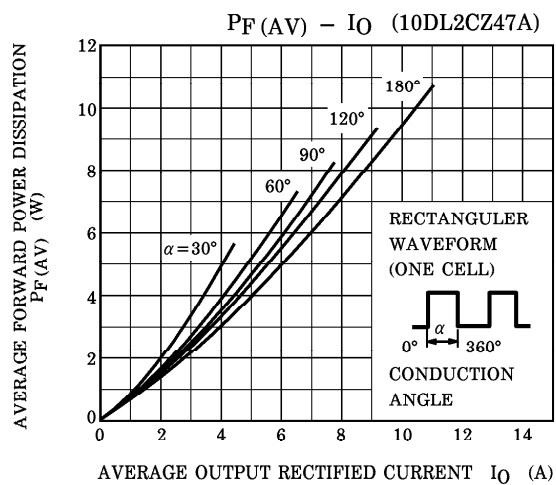
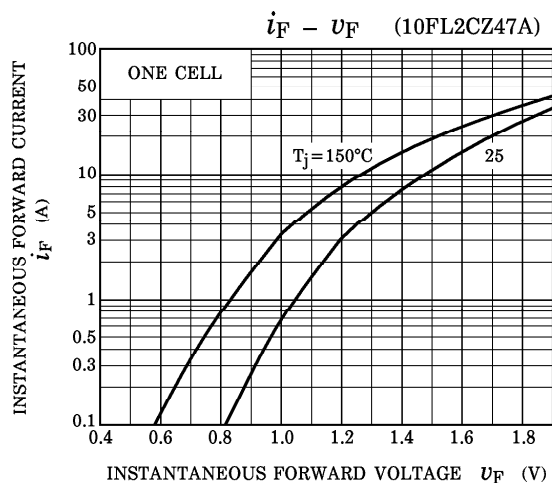
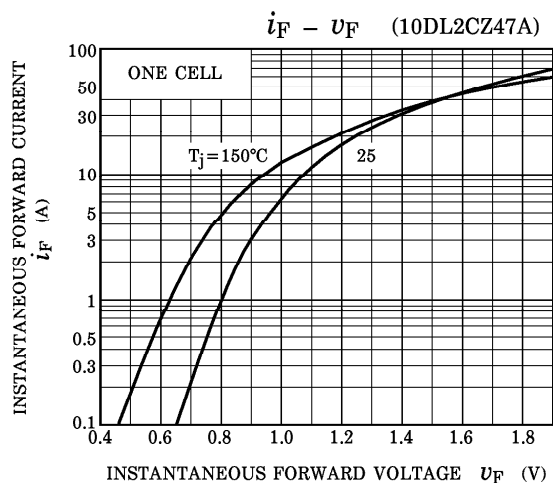
## MARKING



|    |                                                                                   |         |      |            |
|----|-----------------------------------------------------------------------------------|---------|------|------------|
| *1 | MARK                                                                              | 10DL2CZ | TYPE | 10DL2CZ47A |
|    |                                                                                   | 10FL2CZ |      | 10FL2CZ47A |
|    |                                                                                   | 10GL2CZ |      | 10GL2CZ47A |
| *2 | A                                                                                 |         |      |            |
| *3 | Lot Number                                                                        |         |      |            |
|    | □□—Month (Starting from Alphabet A)<br>└——Year (Last Number of the Christian Era) |         |      |            |

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