

TOSHIBA HIGH EFFICIENCY RECTIFIER SILICON EPITAXIAL TYPE

5DLZ47A

SWITCHING TYPE POWER SUPPLY APPLICATION

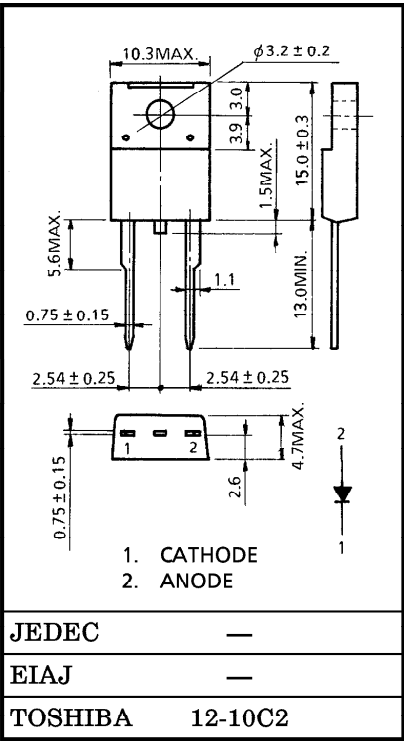
Unit in mm

CONVERTER & CHOPPER APPLICATION

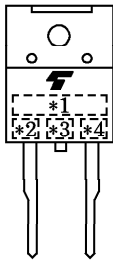
- Repetitive Peak Reverse Voltage : $V_{RRM}=200V$
- Average Output Rectified Current : $I_O=5A$
- Ultra Fast Reverse-Recovery Time : $t_{rr}=35ns$ (Max.)
- Low Forward Voltage : $V_{FM}=0.98V$
- Low Switching Losses and Low Output Noise.


MAXIMUM RATINGS

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|-----------|------------------------|------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 200 | V |
| Average Output Rectified Current | I_O | 5 | A |
| Peak One Cycle Surge Forward Current (Non-Repetitive) | I_{FSM} | 50 (50Hz) 60 (60Hz) | A |
| Junction Temperature | T_j | -40~150 | °C |
| Storage Temperature Range | T_{stg} | -40~150 | °C |
| Screw Torque | — | 0.6 | N·m |



MARKING



| | | | | |
|----|---|---|------|---------|
| *1 | MARK | 5DLZ47 | TYPE | 5DLZ47A |
| *2 | A | | | |
| *3 | Polarity |  | | |
| *4 | <div>Lot Number</div> <div><div><div></div><div></div></div><div>Month (Starting from Alphabet A)</div><div>Year (Last Number of the Christian Era)</div></div> | | | |

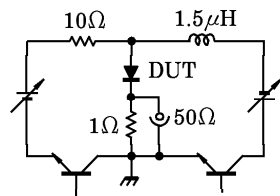
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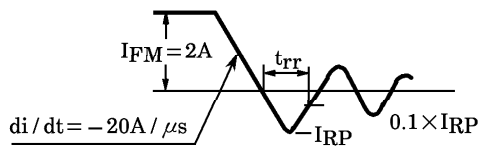
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | MAX. | UNIT |
|---------------------------------|---------------|--------------------------------|------|------|---------------|
| Peak Forward Voltage | V_{FM} | $I_{FM} = 5A$ | — | 0.98 | V |
| Repetitive Peak Reverse Current | I_{RRM} | $V_{RRM} = 200V$ | — | 10 | μA |
| Reverse Recovery Time (Note 1) | t_{rr} | $I_F = 2A, di/dt = -20A/\mu s$ | — | 35 | ns |
| Forward Recovery Time (Note 2) | t_{fr} | $I_F = 1A$ | — | 100 | ns |
| Thermal Resistance | $R_{th(j-c)}$ | DC | — | 4.0 | $^{\circ}C/W$ |

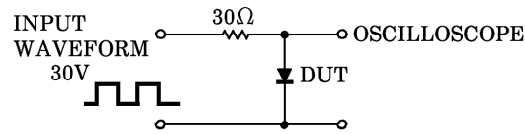
Note 1 : t_{rr} TEST CIRCUIT



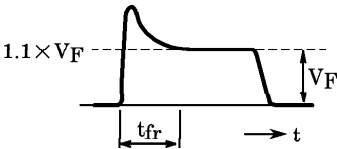
t_{rr} WAVEFORM



Note 2 : t_{fr} TEST CIRCUIT



t_{fr} WAVEFORM



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