

TOSHIBA HIGH EFFICIENCY RECTIFIER (HED) SILICON EPITAXIAL JUNCTION TYPE

3DL41A

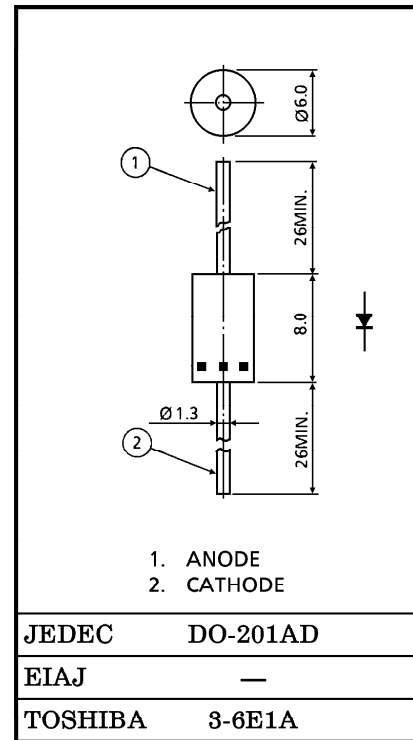
SWITCHING TYPE POWER SUPPLY APPLICATIONS

Unit in mm

- Repetitive Peak Reverse Voltage : $V_{RRM} = 200V$
- Average Forward Current : $I_F (AV) = 3.0A$
- Very Fast Reverse-Recovery Time : $t_{rr} = 35ns (Max.)$
- Low Forward Voltage : $V_{FM} = 0.98V (Max.)$
- Available to Raduce Switching Losses and Output Noise.

MAXIMUM RATINGS

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|------------|-----------|------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 200 | V |
| Average Forward Current | $I_F (AV)$ | 3.0 | A |
| Peak One Cycle Surge Forward Current (Non-Repetitive) | I_{FSM} | 80 (50Hz) | A |
| | | 88 (60Hz) | |
| Junction Temperature | T_j | -40~150 | °C |
| Storage Temperature | T_{stg} | -40~150 | °C |

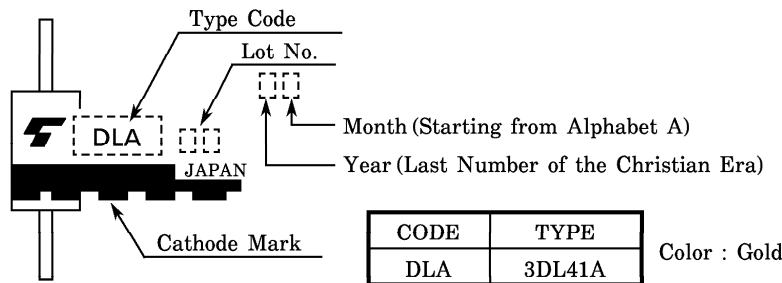


ELECTRICAL CHARACTERISTICS (Ta = 25°C)

Weight : 1.18g

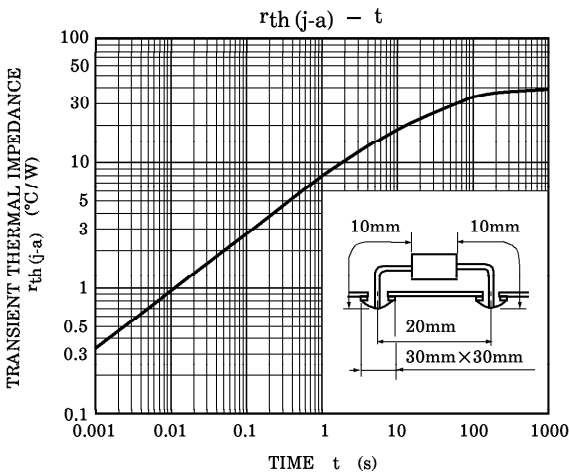
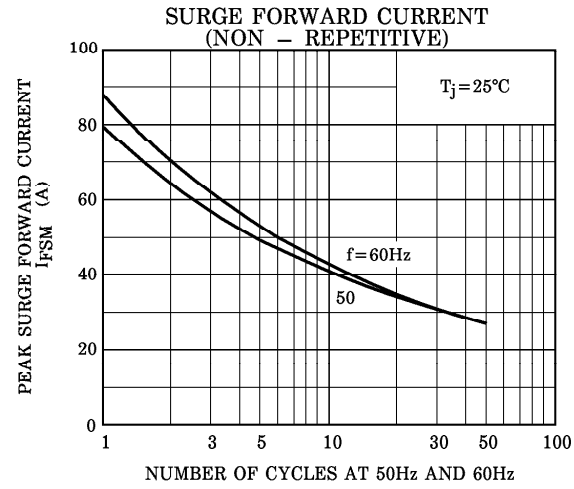
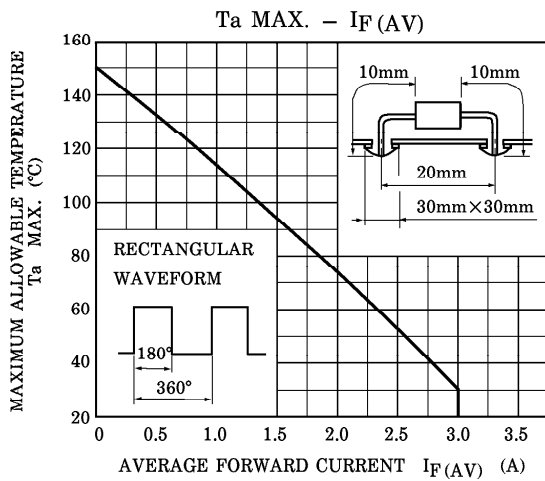
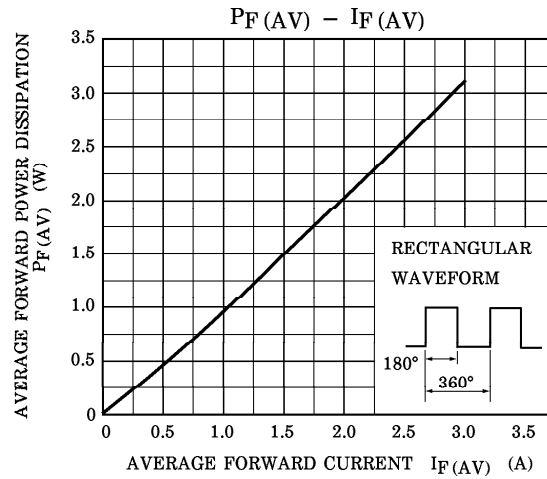
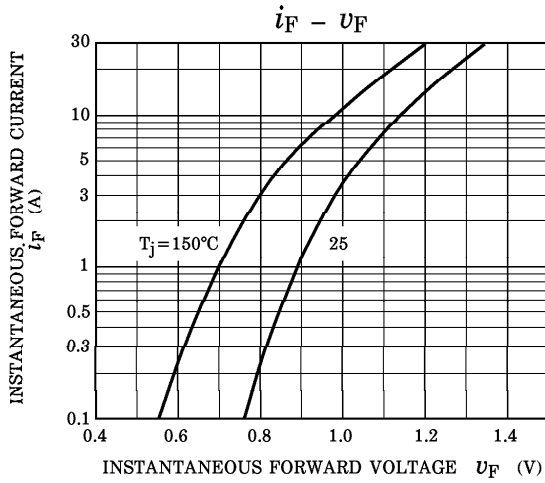
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---------------------------------|---------------|------------------------------------|------|------|------|---------|
| Peak Forward Voltage | V_{FM} | $I_{FM} = 3.0A$ | — | — | 0.98 | V |
| Repetitive Peak Reverse Current | I_{RRM} | $V_{RRM} = 200V$ | — | — | 100 | μA |
| Reverse Recovery Time | t_{rr} | $I_F = 1A, di / dt = -30A / \mu s$ | — | — | 35 | ns |
| Forward Recovery Time | t_{fr} | $I_F = 1.0A$ | — | — | 100 | ns |
| Thermal Resistance | $R_{th(j-a)}$ | Junction to Ambient | — | — | 57 | °C / W |
| Thermal Resistance | $R_{th(j-l)}$ | Junction to Lead | — | — | 18 | °C / W |

MARKING



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