

TOSHIBA SUPER FAST RECOVERY RECTIFIER SILICON DIFFUSED TYPE

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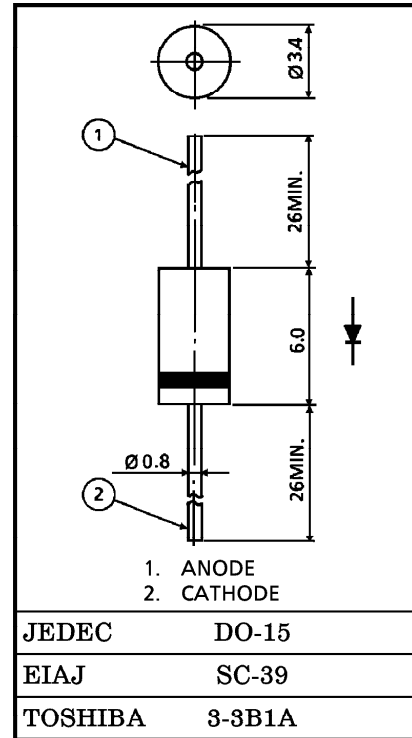
SWITCHING TYPE POWER SUPPLY APPLICATIONS

Unit in mm

- Repetitive Peak Reverse Voltage : $V_{RRM}=1000V$
- Average Forward Current : $I_F(AV)=1.0A$
- Very Fast Reverse-Recovery Time : $t_{rr}=100ns$

MAXIMUM RATINGS

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|-----------|-----------|------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 1000 | V |
| Average Forward Current | $I_F(AV)$ | 1.0 | A |
| Peak One Cycle Surge Forward Current (Non-Repetitive) | I_{FSM} | 10 (50Hz) | A |
| | | 11 (60Hz) | |
| Junction Temperature | T_j | -40~150 | °C |
| Storage Temperature Range | T_{stg} | -40~150 | °C |



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

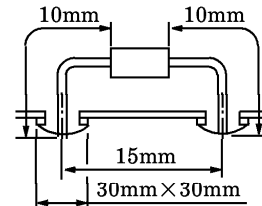
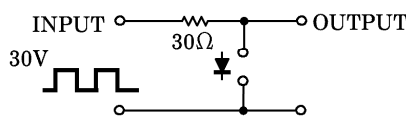
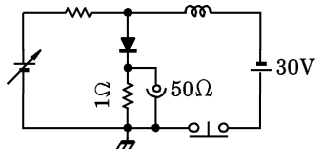
Weight : 0.42g

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---------------------------------|---------------|----------------------------|------|------|------|---------|
| Peak Forward Voltage | V_{FM} | $I_{FM}=1.0A$ | — | — | 3.3 | V |
| Repetitive Peak Reverse Current | I_{RRM} | $V_{RRM}=\text{Rated}$ | — | — | 100 | μA |
| Reverse Recovery Time (Note 1) | t_{rr} | $I_F=1A, di/dt=-30A/\mu s$ | — | — | 100 | ns |
| Forward Recovery Time (Note 2) | t_{fr} | $I_F=1.0A$ | — | 300 | — | ns |
| Thermal Resistance (Note 3) | $R_{th(j-a)}$ | Junction to Ambient | — | — | 60 | °C/W |
| Thermal Resistance (Note 3) | $R_{th(j-l)}$ | Junction to Lead | — | — | 34 | °C/W |

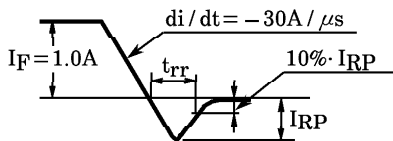
Note 1 : t_{rr} TEST CIRCUIT

Note 2 : t_{fr} TEST CIRCUIT

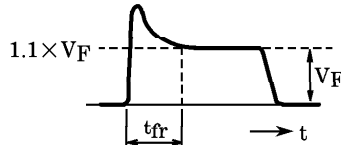
Note 3 : THERMAL RESISTANCE



WAVEFORM

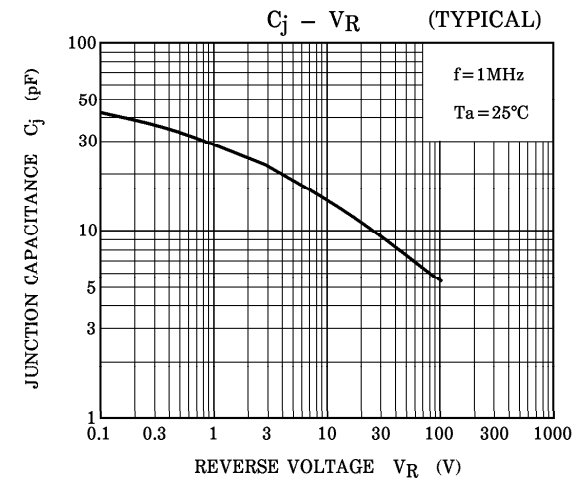
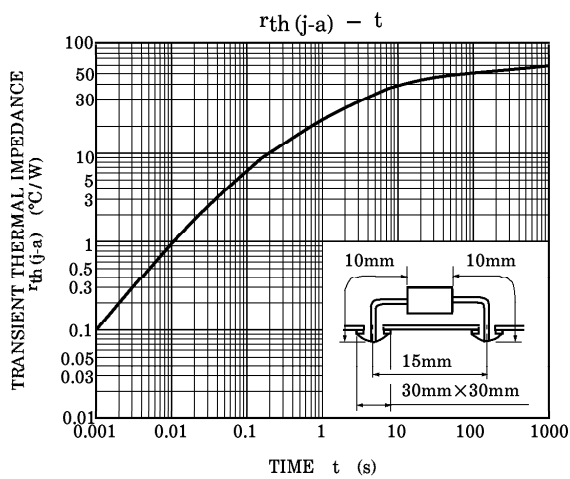
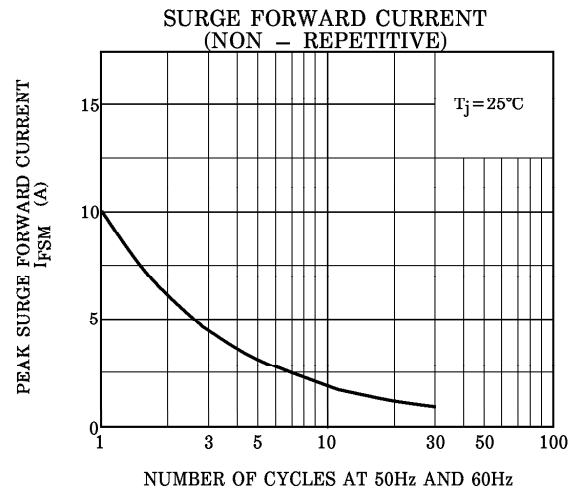
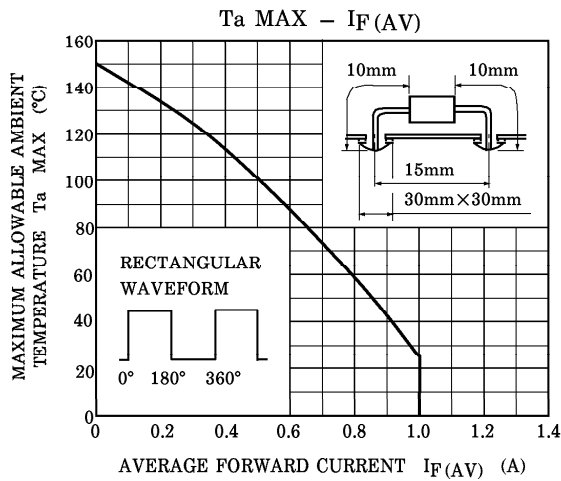
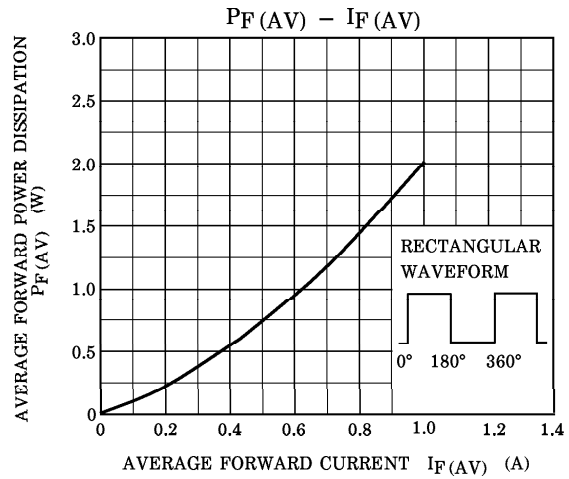
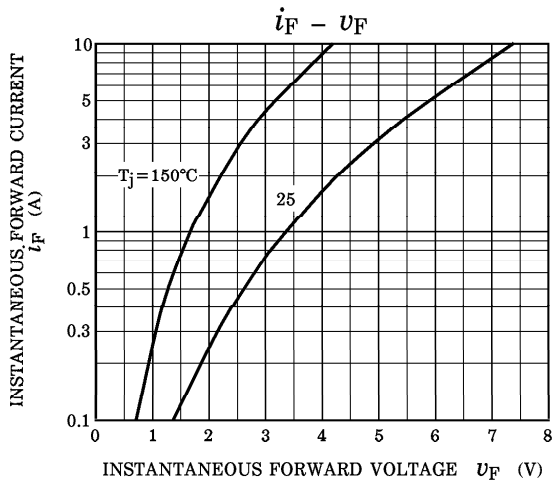


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