

TOSHIBA FAST RECOVERY RECTIFIER SILICON DIFFUSED TYPE

3GH45

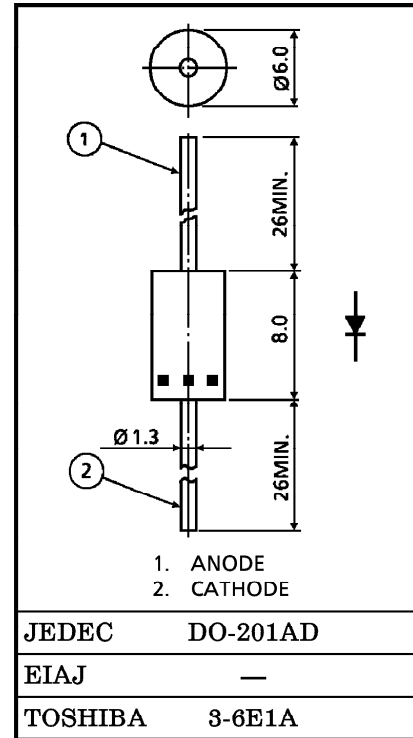
SWITCHING TYPE POWER SUPPLY APPLICATIONS

Unit in mm

- Repetitive Peak Reverse Voltage : $V_{RRM} = 400V$
- Average Forward Current : $I_F (AV) = 3.0A$
- Very Fast Reverse-Recovery Time : $t_{rr} = 200ns (Max.)$

MAXIMUM RATINGS

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|------------|-----------|------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 400 | V |
| Average Forward Current ($T_a = 25^\circ C$) | $I_F (AV)$ | 3.0 | A |
| Peak One Cycle Surge Forward Current (Non-Repetitive) | I_{FSM} | 70 (50Hz) | A |
| | | 77 (60Hz) | |
| Junction Temperature | T_j | -40~150 | $^\circ C$ |
| Storage Temperature Range | T_{stg} | -40~150 | $^\circ C$ |

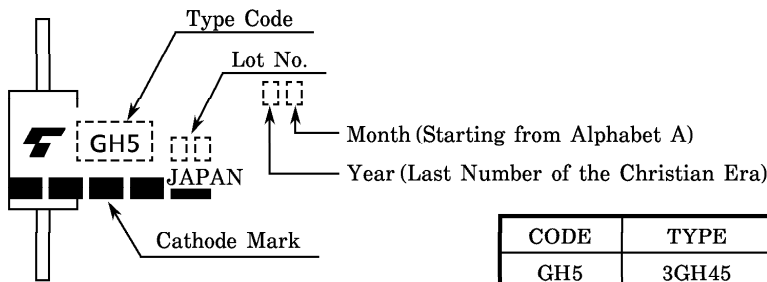


Weight : 1.18g

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

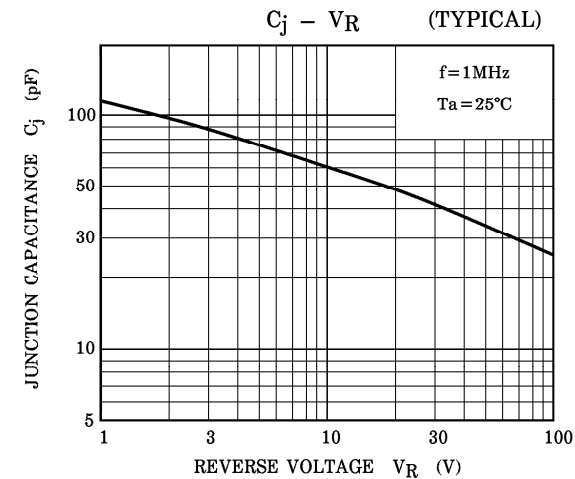
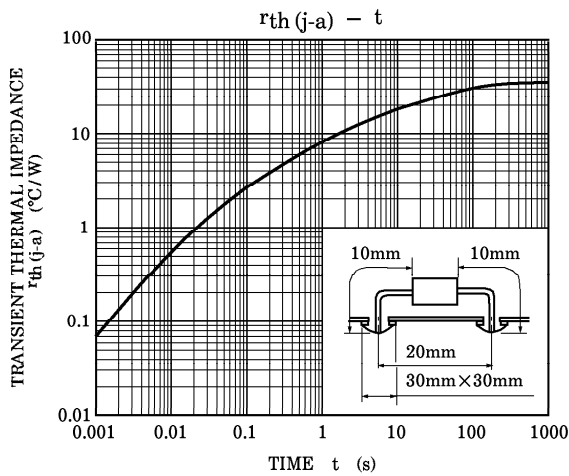
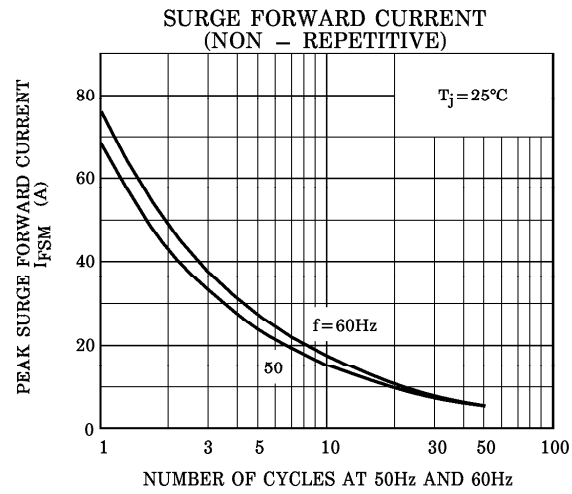
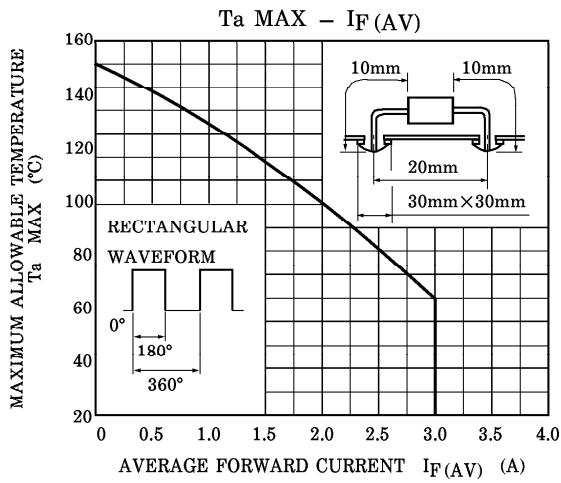
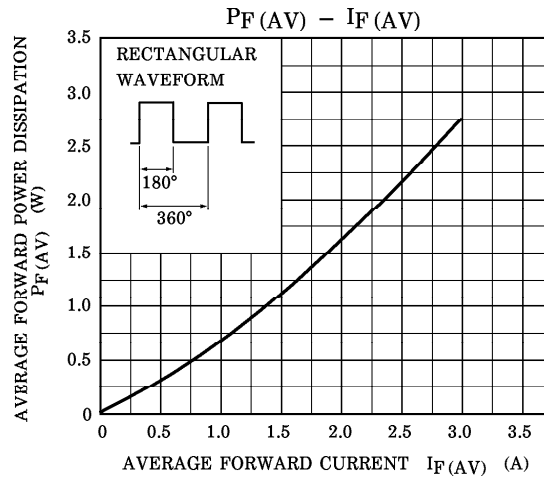
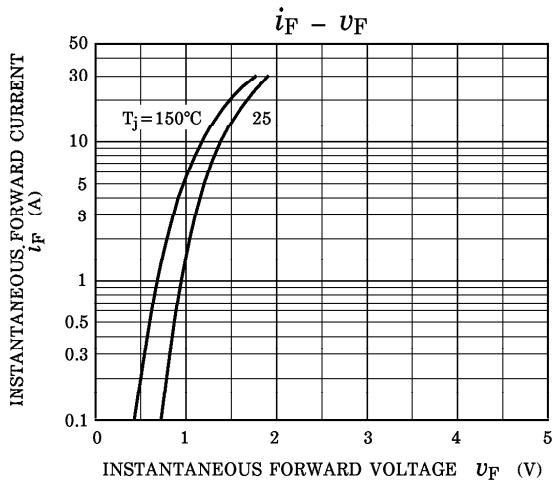
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---------------------------------|---------------|--------------------------------|------|------|------|--------------|
| Peak Forward Voltage | V_{FM} | $I_{FM} = 3.0A$ | — | — | 1.1 | V |
| Repetitive Peak Reverse Current | I_{RRM} | $V_{RRM} = 400V$ | — | — | 100 | μA |
| Reverse Recovery Time | t_{rr} | $I_F = 1A, di/dt = -30A/\mu s$ | — | — | 200 | ns |
| Forward Recovery Time | t_{fr} | $I_F = 1.0A$ | — | — | 400 | ns |
| Thermal Resistance | $R_{th(j-c)}$ | Junction to Ambient | — | — | 38 | $^\circ C/W$ |

Marking



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