

TOSHIBA FAST RECOVERY RECTIFIER SILICON DIFFUSED TYPE

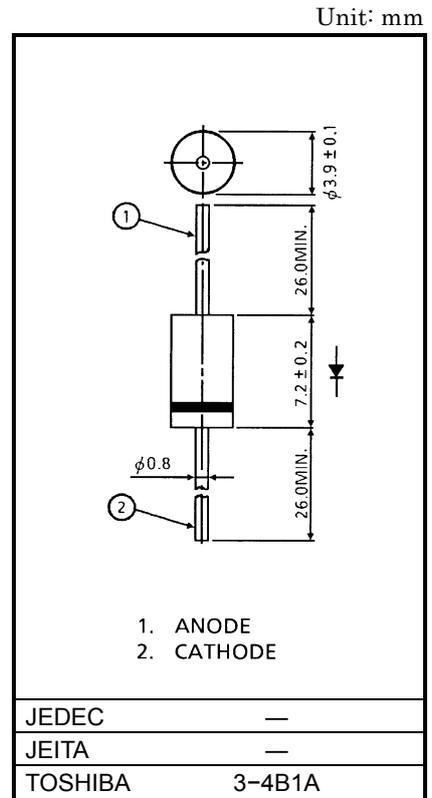
1R5NH45

SWITCHING MODE POWER SUPPLY APPLICATIONS

- Repetitive Peak Reverse Voltage : $V_{RRM} = 1000V$
- Average Forward Current : $I_F (AV) = 1.5A$
- Very Fast Reverse-Recovery Time : $t_{rr} = 200ns (Max)$

MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|------------|-----------|------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 1000 | V |
| Average Forward Current (Ta = 25°C) | $I_F (AV)$ | 1.5 | A |
| Peak One Cycle Surge Forward Current (Non-Repetitive) | I_{FSM} | 30 (50Hz) | A |
| | | 33 (60Hz) | |
| Junction Temperature Range | T_j | -40~150 | °C |
| Storage Temperature Range | T_{stg} | -40~150 | °C |

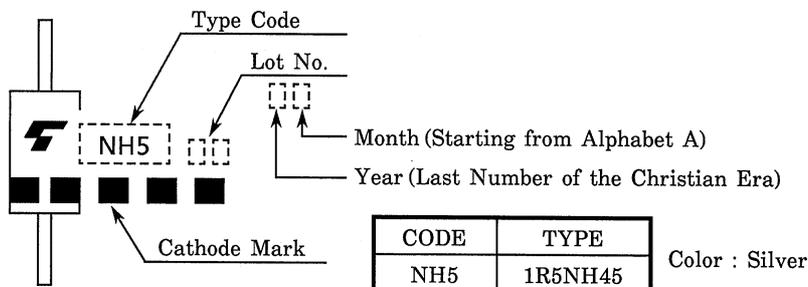


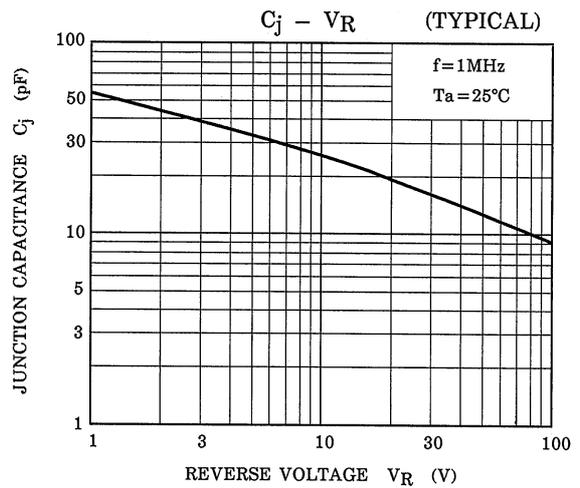
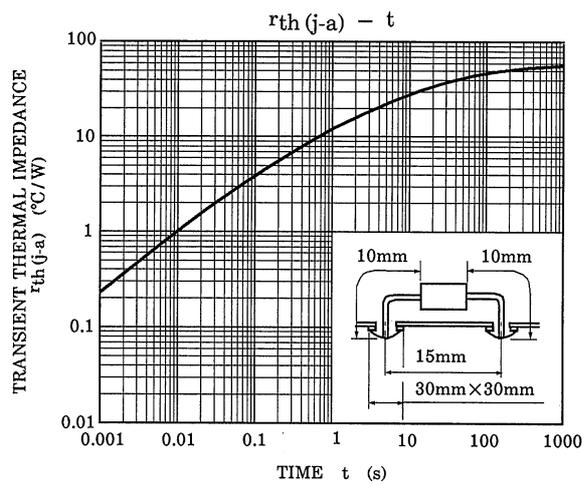
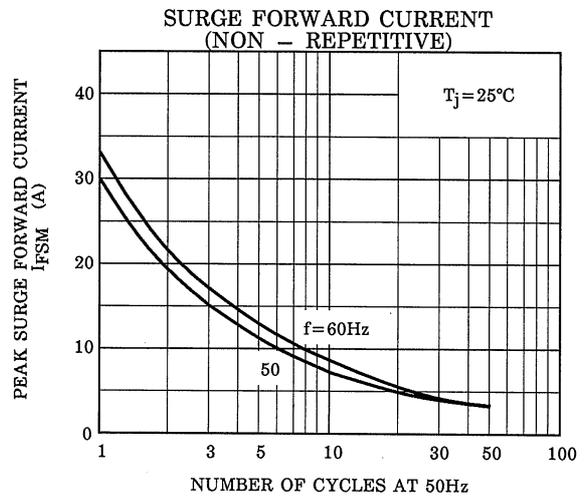
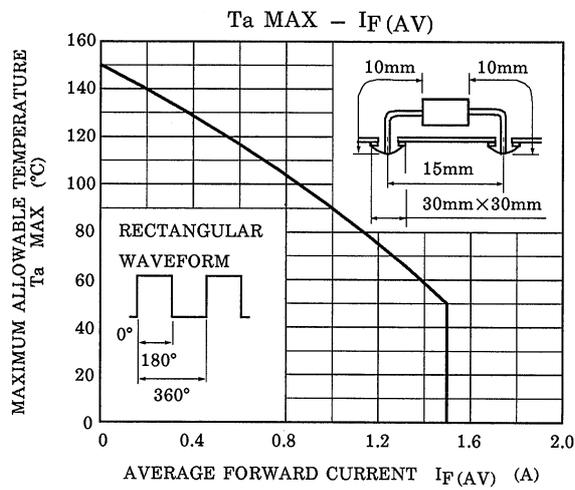
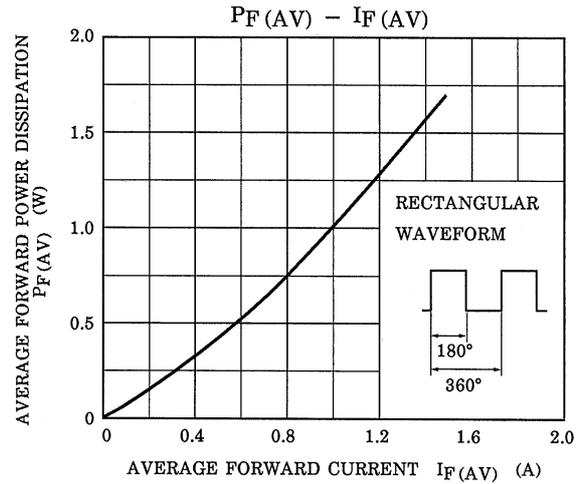
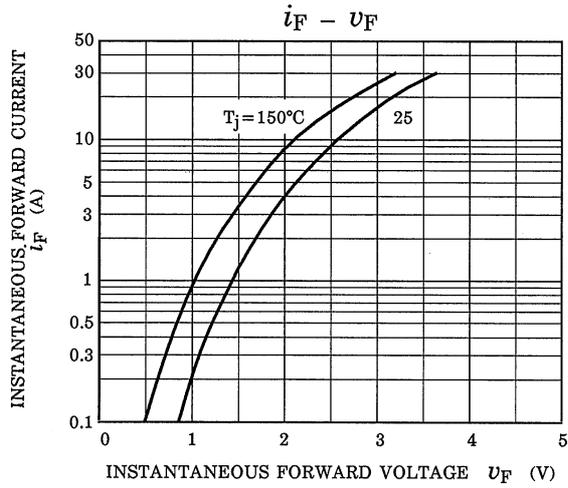
Weight: 0.47g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN | TYP. | MAX | UNIT |
|---------------------------------|---------------|------------------------------------|-----|------|-----|---------|
| Peak Forward Voltage | V_{FM} | $I_{FM} = 1.5A$ | — | — | 1.5 | V |
| Repetitive Peak Reverse Current | I_{RRM} | $V_{RRM} = 1000V$ | — | — | 100 | μA |
| Reverse Recovery Time | t_{rr} | $I_F = 1A, di / dt = -30A / \mu s$ | — | — | 200 | ns |
| Forward Recovery Time | t_{fr} | $I_F = 1.0A$ | — | — | 750 | ns |
| Thermal Resistance | $R_{th(j-a)}$ | Junction to Ambient | — | — | 58 | °C / W |

Marking





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