

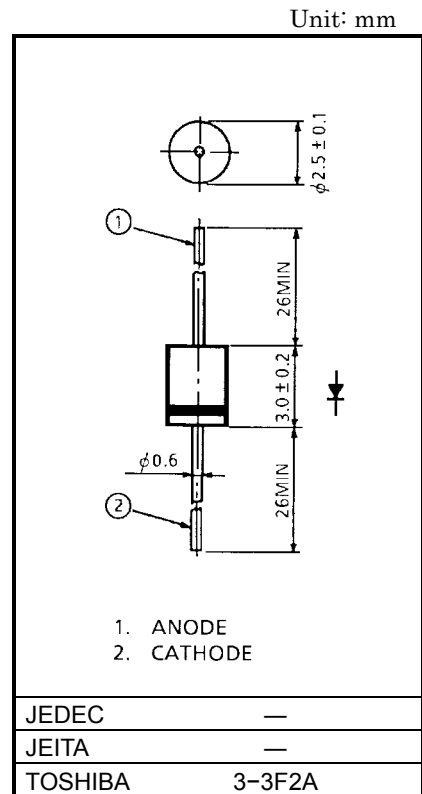
# 1NH42

## SWITCHING MODE POWER SUPPLY APPLICATIONS

- Repetitive Peak Reverse Voltage :  $V_{RRM} = 1000V$
- Average Forward Current :  $I_F (AV) = 1.0A$
- Very Fast Reverse-Recovery Time :  $t_{rr} = 400ns (Max)$

## MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC  | SYMBOL     | RATING    | UNIT |
|---|------------|-----------|------|
| Repetitive Peak Reverse Voltage                       | $V_{RRM}$  | 1000      | V    |
| Average Forward Current (Ta = 25°C)                   | $I_F (AV)$ | 1.0       | 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   |

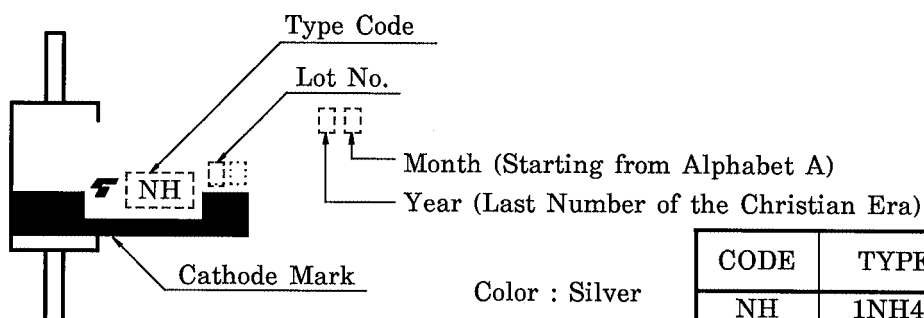


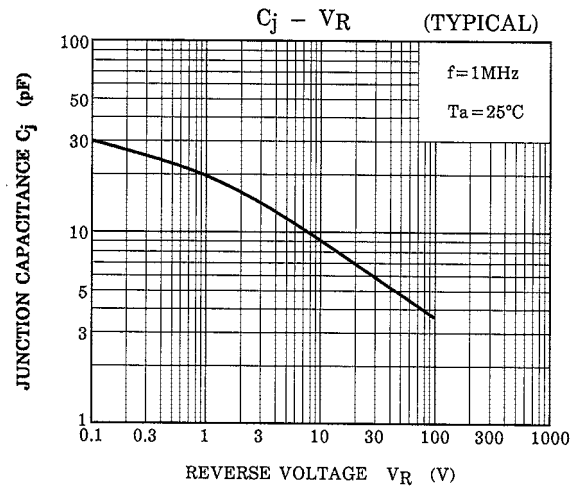
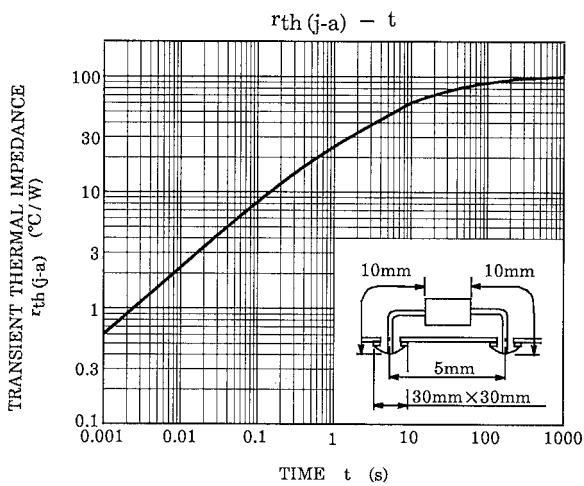
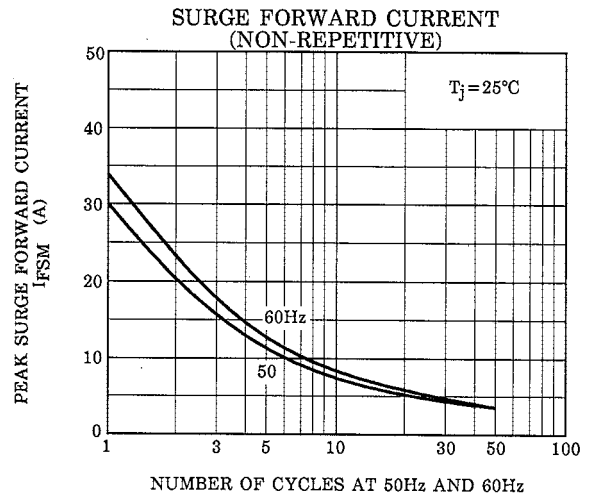
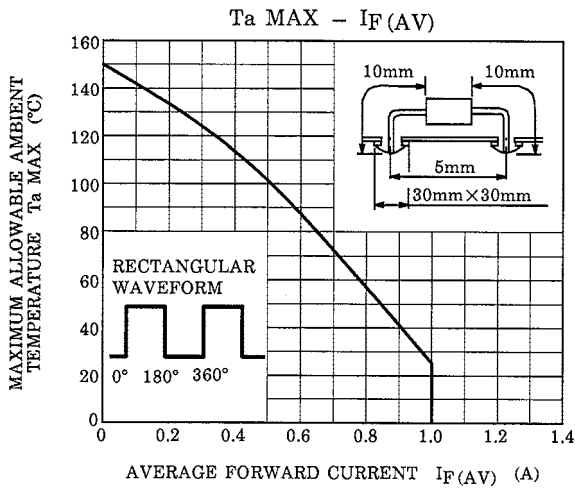
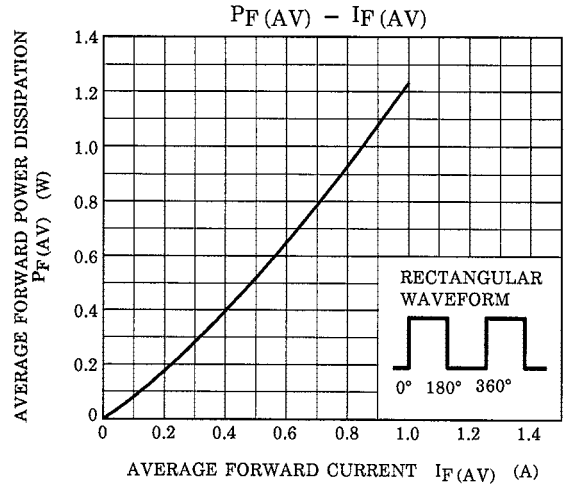
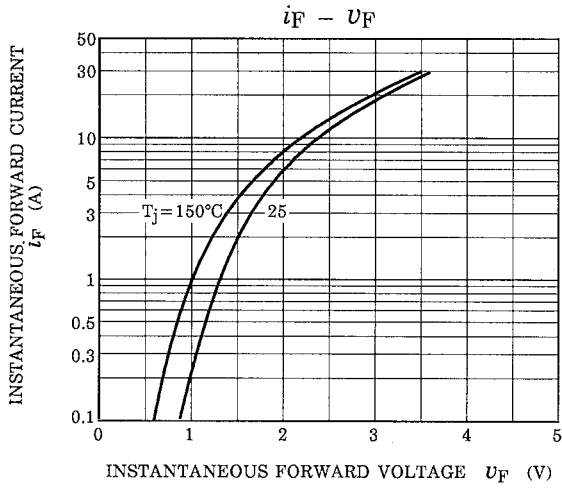
Weight: 0.137g

## ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| CHARACTERISTIC                  | SYMBOL         | TEST CONDITION                     | MIN | TYP. | MAX | UNIT   |
|---------------------------------|----------------|------------------------------------|-----|------|-----|--------|
| Peak Forward Voltage            | $V_{FM}$       | $I_{FM} = 1.0A$                    | —   | —    | 1.3 | V      |
| Repetitive Peak Reverse Current | $I_{RRM}$      | $V_{RRM} = 1000V$                  | —   | —    | 10  | μA     |
| Reverse Recovery Time           | $t_{rr}$       | $I_F = 1A, di / dt = -30A / \mu s$ | —   | —    | 400 | ns     |
| Forward Recovery Time           | $t_{fr}$       | $I_F = 1.0A$                       | —   | —    | 850 | ns     |
| Thermal Resistance              | $R_{th (j-a)}$ | Junction to Ambient                | —   | —    | 98  | °C / W |

## MARK





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