#### TOSHIBA SUPER FAST RECOVERY RECTIFIER SILICON DIFFUSED TYPE

# **U05NU44**

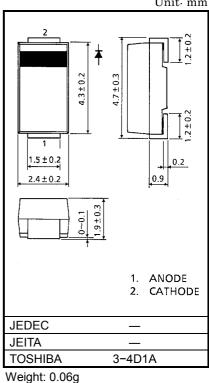
### SWITCHING MODE POWER SUPPLY APPLICATIONS

- Repetitive Peak Reverse Voltage  $: V_{RRM} = 1000$
- Average Forward Current  $: I_F (AV) = 0.5A$ •
- Very Fast Reverse-Recovery Time : trr = 100ns (Max)

#### MAXIMUM RATINGS (Ta = 25°C)

TOSHIBA

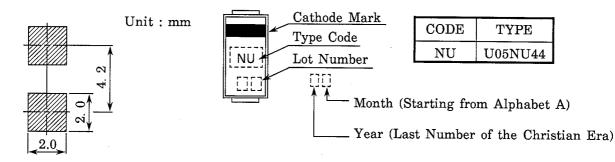
| CHARACTERISTIC   | SYMBOL              | RATING                 | UNIT |
|--|---------------------|------------------------|------|
| Repetitive Peak Reverse Voltage                          | V <sub>RRM</sub>    | 1000                   | V    |
| Average Forward Current                                  | I <sub>F (AV)</sub> | 0.5                    | А    |
| Peak One Cycle Surge Forward<br>Current (Non-Repetitive) | I <sub>FSM</sub>    | 10 (50H <sub>Z</sub> ) | А    |
| Junction Temperature Range                               | Tj                  | -40~150                | °C   |
| Storage Temperature Range                                | T <sub>stg</sub>    | -40~150                | °C   |



#### ELECTRICAL CHARACTERISTICS (Ta = 25°C)

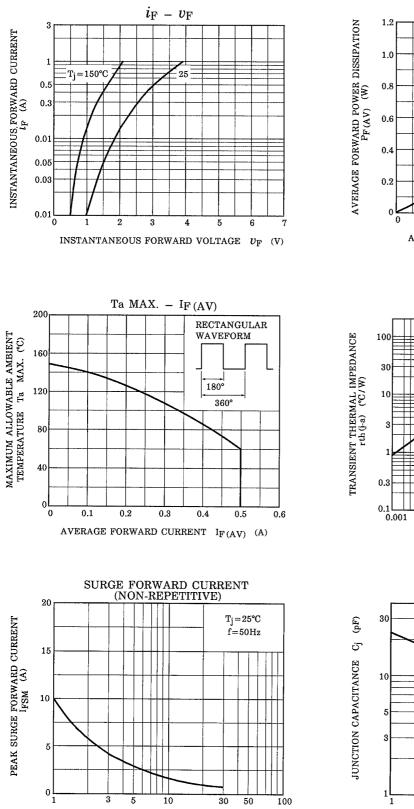
| CHARACTERISTIC                     | SYMBOL           | TEST CONDITION                           | MIN | TYP. | MAX | UNIT |
|------------------------------------|------------------|--|-----|------|-----|------|
| Peak Forward Voltage               | V <sub>FM</sub>  | I <sub>FM</sub> = 0.5A                   | _   | _    | 3.0 | V    |
| Repetitive Peak Reverse<br>Current | I <sub>RRM</sub> | V <sub>RRM</sub> = 1000V                 |     | _    | 100 | μA   |
| Reverse Recovery Time              | t <sub>rr</sub>  | I <sub>F</sub> = 1A, di / dt = −30A / μs | _   | _    | 100 | ns   |
| Forward Recovry Time               | t <sub>fr</sub>  | I <sub>F</sub> = 1.0A                    |     | 300  | —   | ns   |

#### STANDARD SOLDERING PAD MARKING



Unit: mm

## TOSHIBA

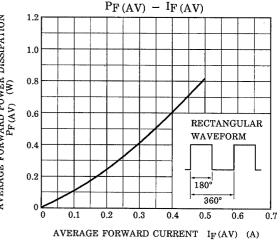


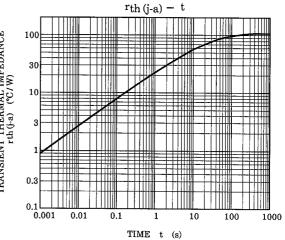
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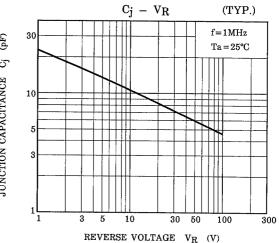
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NUMBER OF CYCLES AT 50Hz

30 50 100







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