

TOSHIBA SUPER FAST RECOVERY RECTIFIER SILICON DIFFUSED TYPE

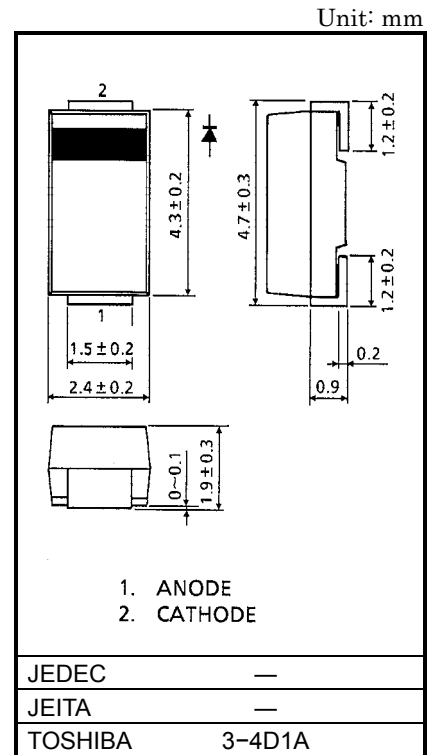
## U1GU44

### SWITCHING MODE POWER SUPPLY APPLICATIONS

- Repetitive Peak Reverse Voltage :  $V_{RRM} = 400\text{ V}$
- Average Forward Current :  $I_F (AV) = 1.0\text{ A}$
- Very Fast Reverse-Recovery Time :  $t_{rr} = 100\text{ ns (Max)}$
- Surface Mounting Plastic Mold Package

### MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )

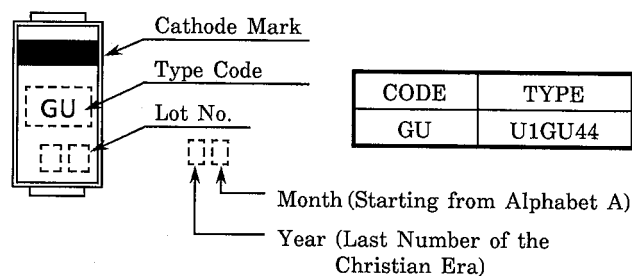
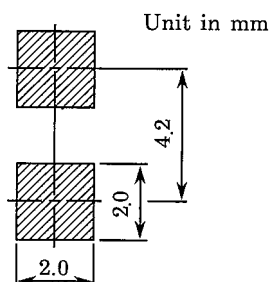
| CHARACTERISTIC  | SYMBOL     | RATING     | UNIT             |
|---|------------|------------|------------------|
| Repetitive Peak Reverse Voltage                       | $V_{RRM}$  | 400        | V                |
| Average Forward Current                               | $I_F (AV)$ | 1.0        | A                |
| Peak One Cycle Surge Forward Current (Non-Repetitive) | $I_{FSM}$  | 15 (50 Hz) | A                |
|   |            | 17 (60 Hz) |                  |
| Junction Temperature                                  | $T_j$      | -40~150    | $^\circ\text{C}$ |
| Storage Temperature Range                             | $T_{stg}$  | -40~150    | $^\circ\text{C}$ |

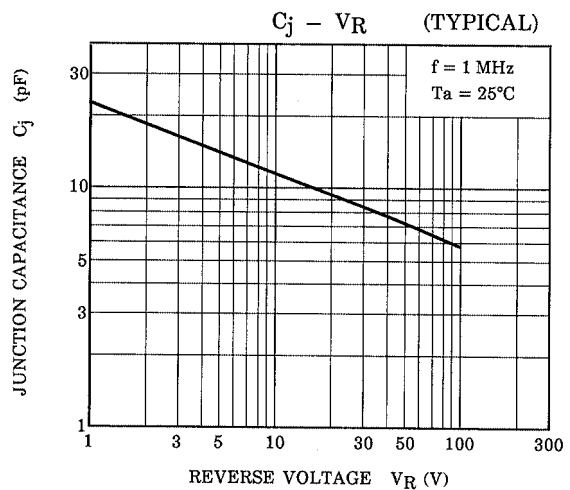
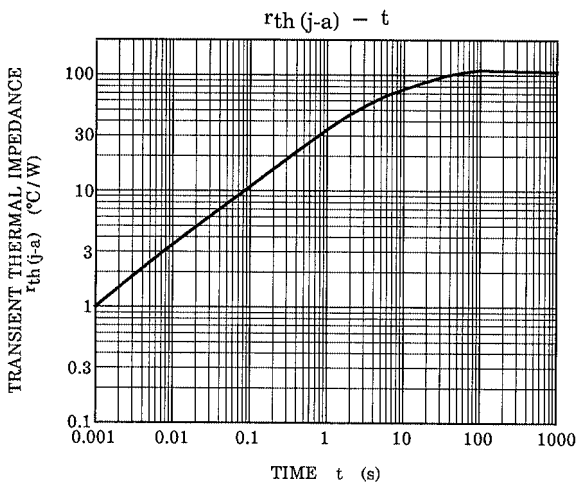
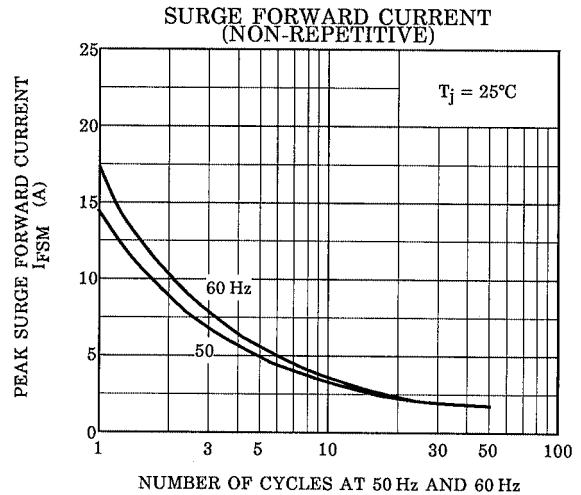
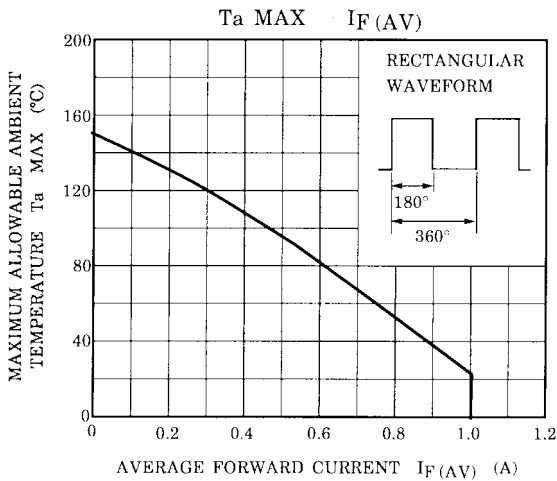
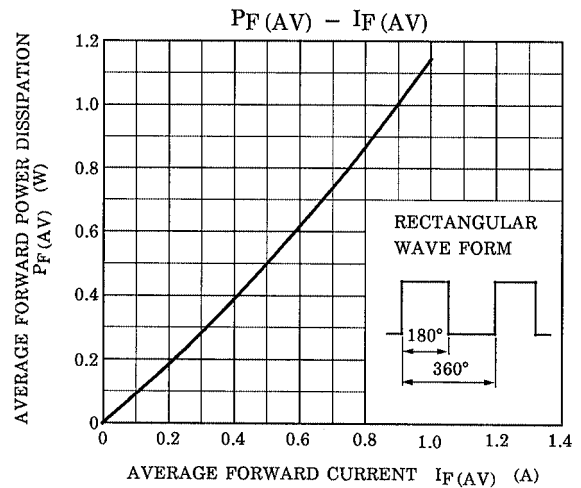
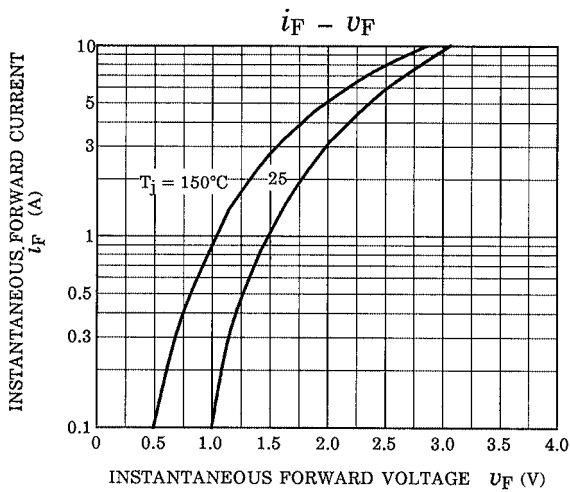


### ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ\text{C}$ )

| CHARACTERISTIC                  | SYMBOL    | TEST CONDITION  | MIN | TYP. | MAX | UNIT          |
|---------------------------------|-----------|---|-----|------|-----|---------------|
| Peak Forward Voltage            | $V_{FM}$  | $I_{FM} = 1.0\text{ A}$                                 | —   | —    | 1.5 | V             |
| Repetitive Peak Reverse Current | $I_{RRM}$ | $V_{RRM} = 400\text{ V}$                                | —   | —    | 50  | $\mu\text{A}$ |
| Reverse Recovery Time           | $t_{rr}$  | $I_F = 1\text{ A}$ , $di/dt = -30\text{ A}/\mu\text{s}$ | —   | —    | 100 | ns            |
| Forward Recovery Time           | $t_{fr}$  | $I_F = 1.0\text{ A}$                                    | —   | —    | 250 | ns            |

### STANDARD SOLDERING PAD MARKING





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