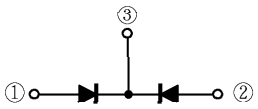
TOSHIBA SCHOTTKY BARRIER RECTIFIER STACK SCHOTTKY BARRIER TYPE

# 3GWJ2C42, U3GWJ2C42

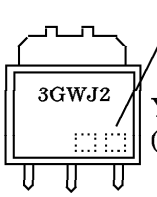
SWITCHING TYPE POWER SUPPLY APPLICATION
CONVERTER & CHOPPER APPLICATION

- Average Output Rectified Current : $I_O$=3A
- Repetitive Peak Reverse Voltage : $V_{RRM}$=40V
- Low Switching Losses and Output Noise.

POLARITY



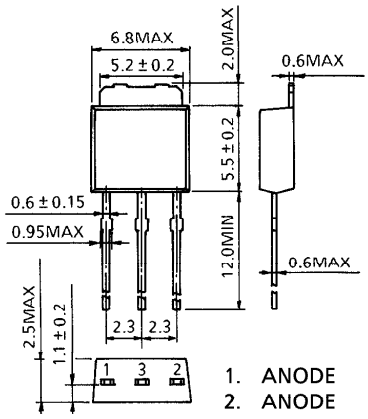

MARKING




Lot Number
Month (Starting from Alphabet A)
Year (Last Number of the Christian Era)

Unit in mm

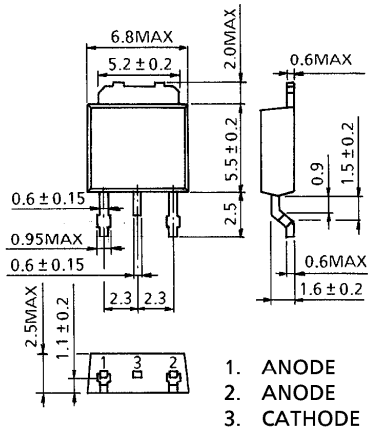
3GWJ2C42




1. ANODE
2. ANODE
3. CATHODE

| | |
|---|---|
| JEDEC | — |
| EIAJ | — |
| TOSHIBA | 12-7B1A |

U3GWJ2C42




1. ANODE
2. ANODE
3. CATHODE

| | |
|---|---|
| JEDEC | — |
| EIAJ | — |
| TOSHIBA | 12-7B2A |

Weight : 0.55g

MAXIMUM RATINGS

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|---|---|---|
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | 40 | V |
| Average Output Rectified Current | $I_O$ | 3 | A |
| Peak One Cycle Surge Forward Current (Sine Wave) | $I_{FSM}$ | 15 (50Hz) | A |
| | | 16.5 (60Hz) | |
| Junction Temperature | $T_j$ | −40~125 | °C |
| Storage Temperature Range | $T_{stg}$ | −40~150 | °C |

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

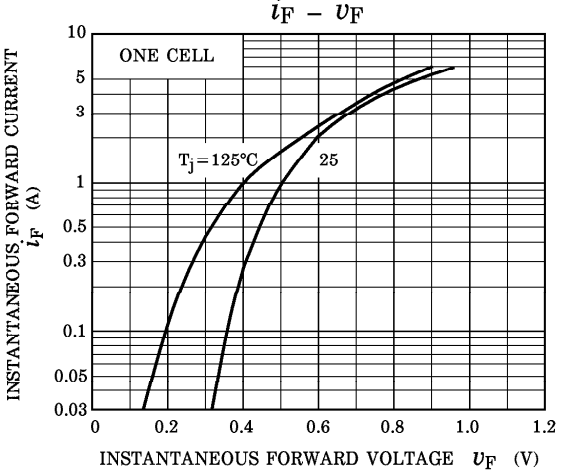
| CHARACTERISTIC | SYMBOL | TEST CONDITION | TYP. | MAX. | UNIT |
|---|---|---|---|---|---|
| Peak Forward Voltage (Note 1) | $V_{FM}$ | $I_{FM}$=1.5A | — | 0.55 | V |
| Repetitive Peak Reverse Current (Note 1) | $I_{RRM}$ | $V_{RRM}$=40V | — | 2.0 | mA |
| Junction Capacitance (Note 1) | $C_j$ | $V_R$=10V, f=1MHz | 62 | — | pF |
| Thermal Resistance (Junction to Case) | $R_{th\ (j\text{-}c)}$ | DC | — | 7 | °C / W |
| Thermal Resistance (Junction to Ambient) | $R_{th\ (j\text{-}a)}$ | DC (250mm * 0.8mm Ceramic) | — | 125 | °C / W |

Note 1 : A value of one cell.

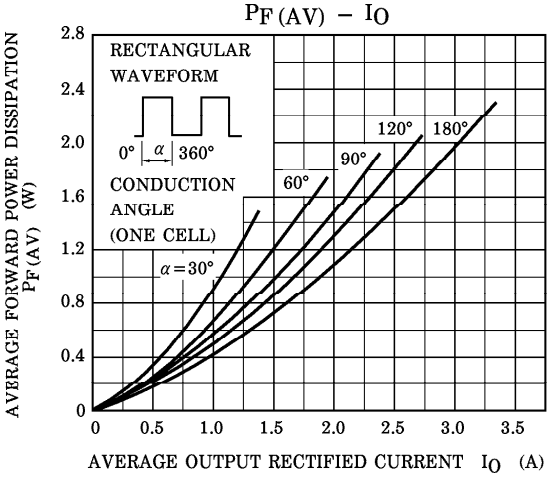
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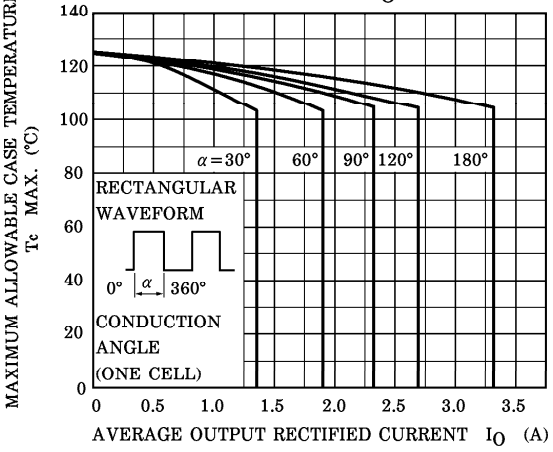
$i_F - v_F$



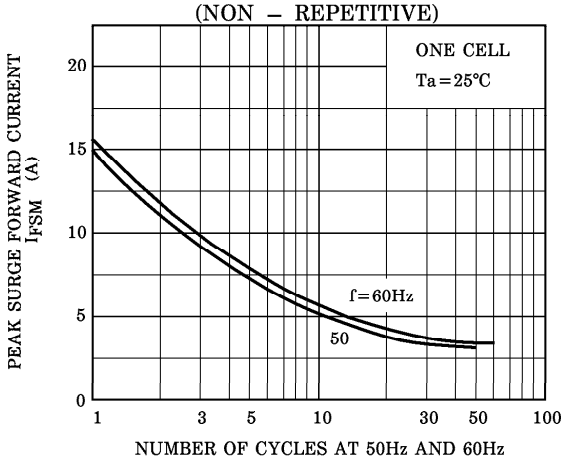

$P_{F(AV)} - I_O$



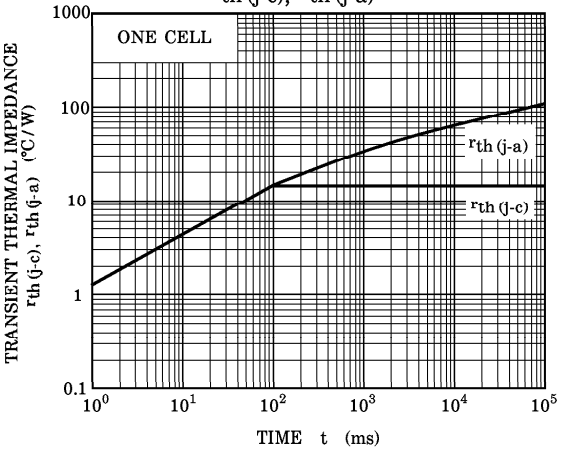

Tc MAX. – $I_O$



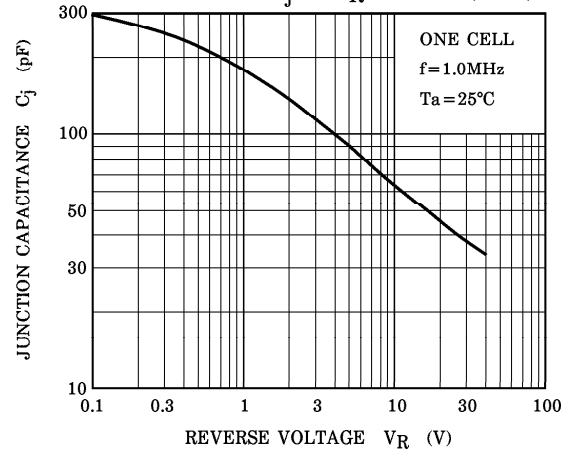

SURGE FORWARD CURRENT (NON – REPETITIVE)




$r_{th\,(j\text{-}c)}$, $r_{th\,(j\text{-}a)}$ – t



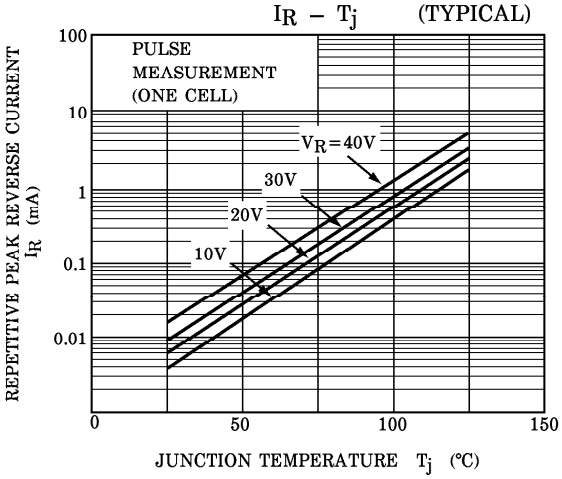

$C_j - V_R$ (TYP.)




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$I_R$ – $T_j$ (TYPICAL)




$P_{R(AV)}$ – $V_R$ (TYPICAL)

