

TOSHIBA FAST RECOVERY DIODE SILICON DIFFUSED TYPE

800EXH22

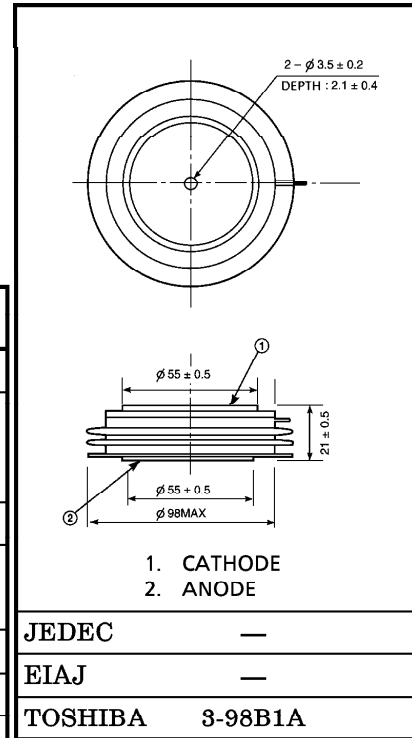
HIGH SPEED RECTIFIER APPLICATIONS

Unit in mm

- Repetitive Peak Reverse Voltage : $V_{RRM}=2500V$
- Average Forward Current : $I_F(AV)=800A$
- Reverse Recovery Time : $t_{rr}=5\mu s$ (MAX.) ($T_j=25^\circ C$)

MAXIMUM RATINGS

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|--------------------------------------------------------------------------------------------|-----------|------------------------------|------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 2500 | V |
| Non-Repetitive Peak Reverse Voltage (Non-Repetitive $\leq 5ms$, $T_j=0\sim 125^\circ C$) | V_{RSM} | 2600 | V |
| Average Forward Current | $I_F(AV)$ | 800 | A |
| Peak One Cycle Surge Forward Current (Non-Repetitive) | I_{FSM} | 16000 (50Hz) 17600 (60Hz) | A |
| Junction Temperature Range | T_j | -40~125 | $^\circ C$ |
| Storage Temperature Range | T_{stg} | -40~125 | $^\circ C$ |
| Mounting Force | — | 29.4 \pm 2.9 | kN |



| | |
|---------|---------|
| JEDEC | — |
| EIAJ | — |
| TOSHIBA | 3-98B1A |

Weight : 630g

ELECTRICAL CHARACTERISTICS

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | MAX. | UNIT | |
|--------------------------------------|---------------|------------------------------------|-------------------|-------|--------------|---------|
| Repetitive Peak Reverse Current | I_{RRM} | $V_{RRM}=2500V, T_j=125^\circ C$ | — | 150 | mA | |
| Peak Forward Voltage | V_{RM} | $I_{FM}=2500A, T_j=25^\circ C$ | — | 2.0 | V | |
| Reverse Recovery Time | t_{rr} | $I_F=800A$ $di_F/dt=100A/\mu s$ | $T_j=25^\circ C$ | — | 5.0 | μs |
| | | | $T_j=125^\circ C$ | — | 7.0 | |
| Thermal Resistance (Junction to Fin) | $R_{th}(j-f)$ | DC | — | 0.025 | $^\circ C/W$ | |

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