

CONTROLLED AVALANCHE RECTIFIER

TOSHIBA {DISCRETE/OPTO}

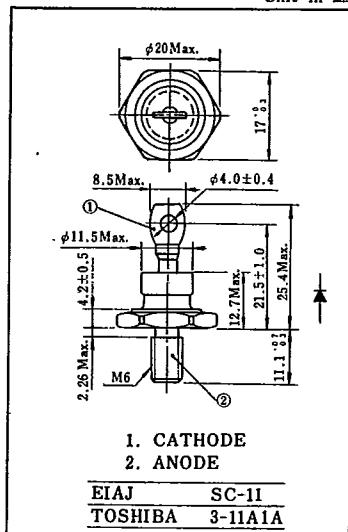
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Unit in mm

25QF11 1200V 25A

MAXIMUM RATINGS

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|--------------------|-----------|------|
| Repetitive Peak Reverse Voltage | V _{RRM} | 800 | V |
| | | 1000 | |
| | | 1200 | |
| Peak Reverse Power Dissipation ($t_w=10\mu s$) $T_a=25^\circ C$ | P _{RSM} | 12 | kW |
| Average Forward Current ($T_c=135^\circ C$) | I _{F(AV)} | 25 | A |
| Peak One Cycle Surge Forward Current (Non-Repetitive) | I _{FSM} | 500(50Hz) | A |
| Junction Temperature | T _j | -40~175 | °C |
| Storage Temperature Range | T _{stg} | -40~175 | °C |
| Stud Torque | | 30 | kgcm |



AC32 is furnished as an accessory.

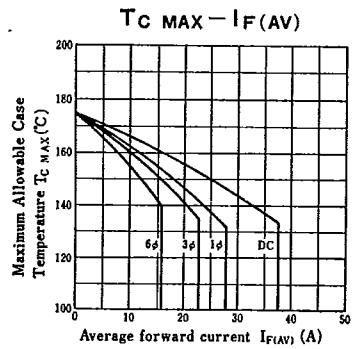
ELECTRICAL CHARACTERISTICS

| CHARACTERISTIC | SYMBOL | CONDITION | MIN. | MAX. | UNIT |
|---------------------------------|----------------------|--|------|------|------|
| Avalanche Breakdown Voltage | V _Z | I _{RRM} =5mA, $T_a=25^\circ C$ | 1000 | 1300 | V |
| | | | 1250 | 1550 | |
| | | | 1500 | 1900 | |
| Peak Forward Voltage | V _{FM} | I _{FM} =100A, $T_a=25^\circ C$ | — | 1.38 | V |
| Repetitive Peak Reverse Current | I _{RRM} | $T_j=175^\circ C$ V _{RRM} =Rated | — | 3.0 | mA |
| | | | — | 2.5 | |
| | | | — | 2.0 | |
| Thermal Resistance (Note 1) | R _{th(j-c)} | DC | — | 1.0 | °C/W |

Notes : 1. Junction to Case.

2. At the series operation parallel capacitors ($0.01\mu F$) to the device are recommended to attach.

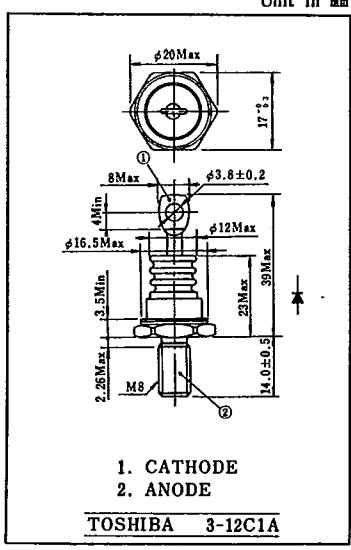
3. Consider the heat radiation including reverse power dissipation.



25FXF12 3000V 25A

MAXIMUM RATINGS

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|--------------------|-----------|------|
| Repetitive Peak Reverse Voltage | V _{RRM} | 3000 | V |
| Peak Reverse Power Dissipation ($t_w=10\mu s$) $T_a=25^\circ C$ | P _{RSM} | 8 | kW |
| Average Forward Current ($T_c=140^\circ C$) | I _{F(AV)} | 25 | A |
| Peak One Cycle Surge Forward Current (Non-Repetitive) | I _{FSM} | 500(50Hz) | A |
| Junction Temperature | T _j | -40~175 | °C |
| Storage Temperature Range | T _{stg} | -40~175 | °C |
| Stud Torque | | 50 | kgcm |



AC56 is furnished as an accessory.

電気的特性

| CHARACTERISTIC | SYMBOL | CONDITION | MIN. | MAX. | UNIT |
|---------------------------------|----------------------|---|------|------|------|
| Avalanche Breakdown Voltage | V _Z | I _{RRM} =5mA, $T_a=25^\circ C$ | 3300 | 4200 | V |
| Peak Forward Voltage | V _{FM} | I _{FM} =80A, $T_a=25^\circ C$ | — | 1.70 | V |
| Repetitive Peak Reverse Current | I _{RRM} | V _{RRM} =Rated, $T_j=175^\circ C$ | — | 7.0 | mA |
| Thermal Resistance (Note 1) | R _{th(j-c)} | DC | — | 0.55 | °C/W |

Notes : 1. Junction to Case.

2. At the series operation parallel capacitors ($0.01\mu F$) to the device are recommended to attach.

3. Consider the heat radiation including reverse power dissipation.

