



- Adopt FRED chip
- Low forward Voltage drop
- Fast reverse recovery time
- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

- : ITO-220AC  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- : Tin plated leads, solderable per J-STD-002 and JESD22-B102
- : As marked

(T<sub>j</sub>=25 Unless otherwise specified

| Device marking code                                                                        |                  |                  | MURS860FL  |
|--------------------------------------------------------------------------------------------|------------------|------------------|------------|
| Repetitive Peak Reverse Voltage                                                            | V <sub>RRM</sub> | V                | 600        |
| Average Rectified Output Current<br>@60Hz sine wave, R-load, T <sub>c</sub> (FIG.1)        | I <sub>O</sub>   | A                | 8          |
| Surge(Non-repetitive) Forward Current<br>@60Hz half sine-wave, 1 cycle, T <sub>j</sub> =25 | I <sub>FSM</sub> | A                | 70         |
| Current Squared Time @1ms≤t≤8.3ms T <sub>j</sub> =25                                       | I <sup>2</sup> t | A <sup>2</sup> s | 20.3       |
| Storage Temperature                                                                        | T <sub>stg</sub> |                  | -55 ~ +175 |
| Junction Temperature                                                                       | T <sub>j</sub>   |                  | -55 ~ +175 |
| Typical Junction capacitance @4V,1MHz                                                      | C <sub>j</sub>   | pF               | 42         |
| Mounting torque<br>@recommend torque 5kg cm                                                | Tor              | kg cm            | 8          |



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| Instantaneous forward voltage drop per diode              | $V_{FM}$   | V       | $I_{FM}=8.0A$ @ $T_j=25$                          |                                                  | - | 2.7  |
|-----------------------------------------------------------|------------|---------|---------------------------------------------------|--------------------------------------------------|---|------|
|                                                           |            |         | $I_{FM}=8.0A$ @ $T_j=150$                         |                                                  | - | 1.8  |
| DC reverse current at rated DC blocking voltage per diode | $I_{RRM1}$ | $\mu A$ | $V_{RM}=V_{RRM}$<br>$T_j=25$                      |                                                  | - | 10   |
|                                                           | $I_{RRM2}$ |         | $V_{RM}=V_{RRM}$<br>$T_j=150$                     |                                                  | - | 100  |
| Reverse Recovery Time                                     | $T_{rr}$   | ns      | $I_F=0.5A$ $I_{RM}=1A$<br>$I_{RR}=0.25A$ $T_j=25$ |                                                  | - | 14   |
|                                                           |            |         | $T_j=25$                                          | $I_F=8A$<br>$di/dt=-200A/\mu s$<br>$V_{RM}=400V$ |   | 39   |
|                                                           |            |         | $T_j=125$                                         |                                                  |   | 50   |
| Peak recovery current                                     | $I_{RRM}$  | A       | $T_j=25$                                          |                                                  | - | 1.7  |
|                                                           |            |         | $T_j=125$                                         |                                                  | - | 4.55 |
| Reverse recovery charge                                   | $Q_{rr}$   | nC      | $T_j=25$                                          |                                                  | - | 34   |
|                                                           |            |         | $T_j=125$                                         |                                                  | - | 113  |

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$T_j=25$  Unless otherwise specified

| Thermal Resistance | Between junction and case | $R_{\theta J-C}$ | /W | 4.0 |
|--------------------|---------------------------|------------------|----|-----|
| Thermal Resistance | Between junction and Air  | $R_{\theta J-A}$ | /W | 50  |

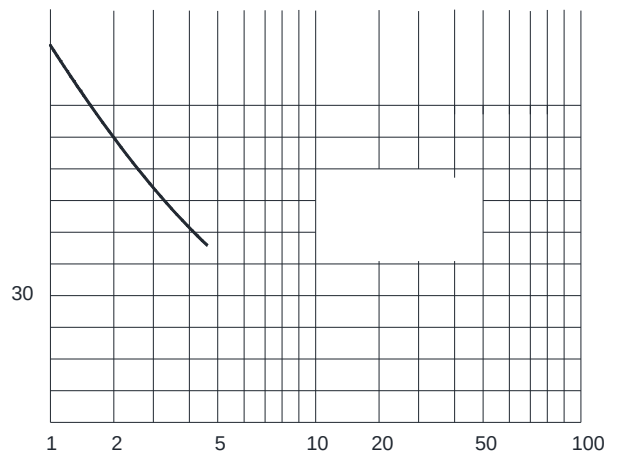
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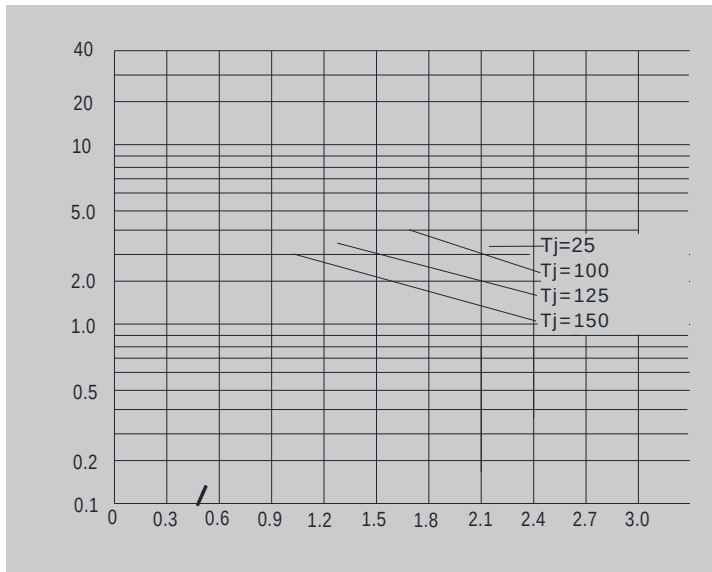
(Example)

| MURS860FL | Approximate 1.6 | 50 | 1000 | 5000 | Tube |
|-----------|-----------------|----|------|------|------|

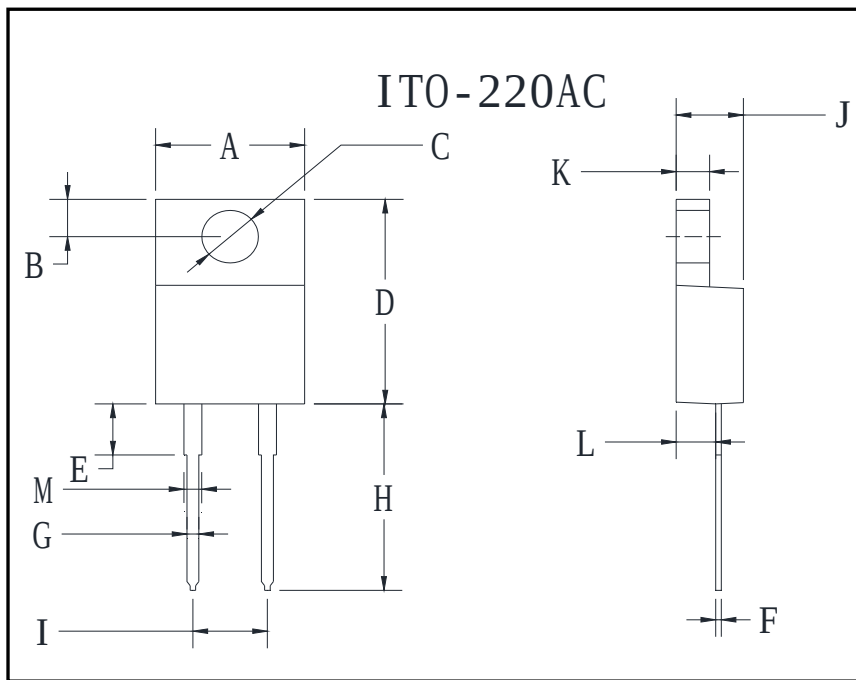
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(Typical)





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| Dim | Min   | Max   |
|-----|-------|-------|
| A   | 9.8   | 10.2  |
| B   | 2.25  | 2.75  |
| C   | 2.95  | 3.45  |
| D   | 14.75 | 15.25 |
| E   | 3.5   | 4.1   |
| F   | 0.45  | 0.75  |
| G   | 0.45  | 0.75  |
| H   | 13.35 | 14.15 |
| I   | 4.97  | 5.23  |
| J   | 4.3   | 4.8   |
| K   | 2.5   | 2.74  |
| L   | 2.58  | 2.82  |
| M   | 1.03  | 1.43  |



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