

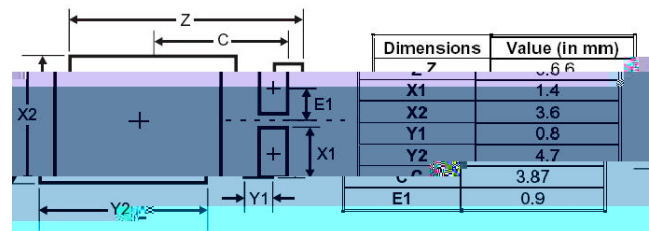
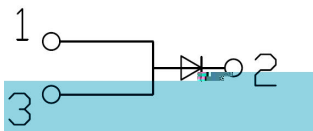
Rev.G Oct.-2018

TO-277

TO-277 Plastic package Ultrafast Recovery Diode.

Silicon epitaxial process to produce ultrafast recovery diode with low reverse leakage current and high reliability. HF Product.

For use in low voltage,high frequency inverters, free wheeling, and polarity protection applications.



PIN1 Anode PIN 2 Cathode PIN 3 Anode

Suggested Pad layout

See Marking Instructions.

| Parameter | Symbol | Rating | Unit |
|---|-----------------|---------|------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 600 | V |
| RMS Reverse voltage | V_{RMS} | 420 | V |
| Average Rectified Forward Current | I_F | 8 | A |
| Non-Repetitive Peak Forward Surge Current | I_{FSM} | 125 | A |
| Thermal Resistance Junction to Case | R_{Jc} | 3.5 | /W |
| Junction and Storage Temperature Range | T_j T_{stg} | -55 150 | |

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|-------------------------------|--------------|--|-----|-----|-----|---------|
| Reverse Voltage | V_{BR} | $I_R=100\mu A$ | 600 | | | V |
| Forward voltage | V_F | $I_F=8A$ $T_c=25$ | | 1.4 | 1.7 | V |
| | | $I_F=16A$ $T_c=25$ | | 1.7 | 2.1 | V |
| | | $I_F=8A$ $T_c=125$ | | 1.4 | 1.7 | V |
| Instantaneous Reverse Current | I_R Note 1 | $V_R=600V$ $T_a=25$ | | | 5 | μA |
| | | $V_R=480V$ $T_a=125$ | | | 300 | μA |
| | | $V_R=600V$ $T_a=125$ | | | 500 | μA |
| Total Capacitance | C_T | $V_R=200V$ | | | 25 | pF |
| Reverse Recovery Time | t_{rr} | $I_F=0.5A$ $I_R=1.0A,$ $I_{RR}=0.25A$ | | | 50 | ns |

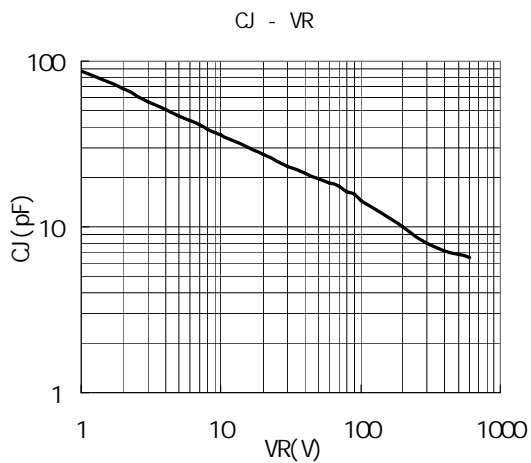
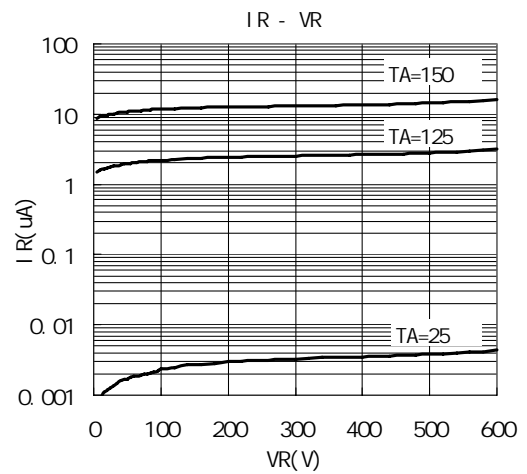
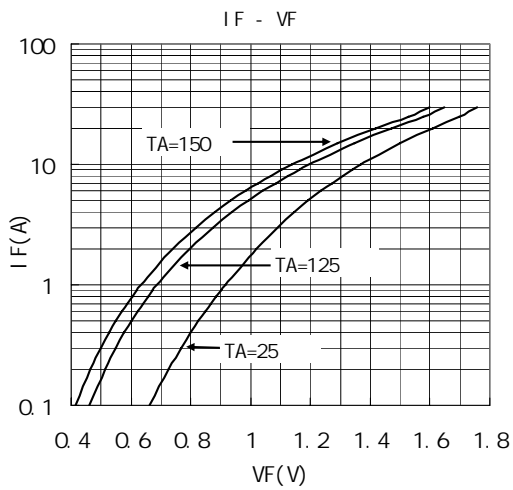
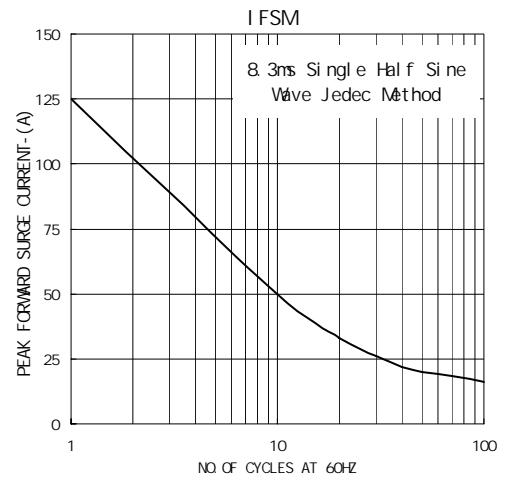
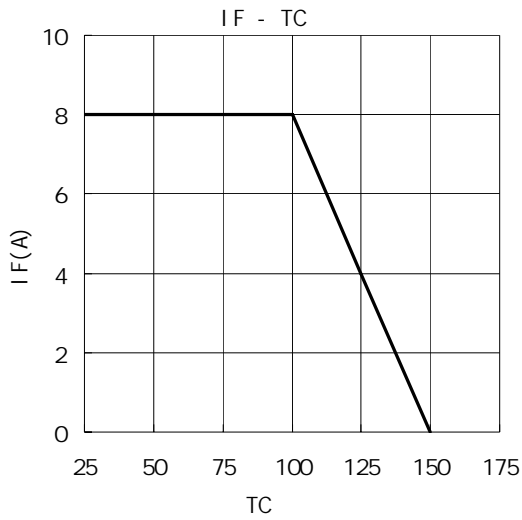
/Notes

1.

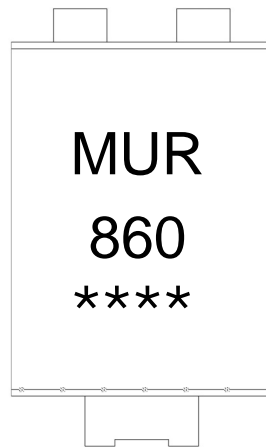
/Short duration pulse test used to minimize self-heating effect.

2.

/ Unless otherwise noted, values for the parameters of a single chip







MUR860

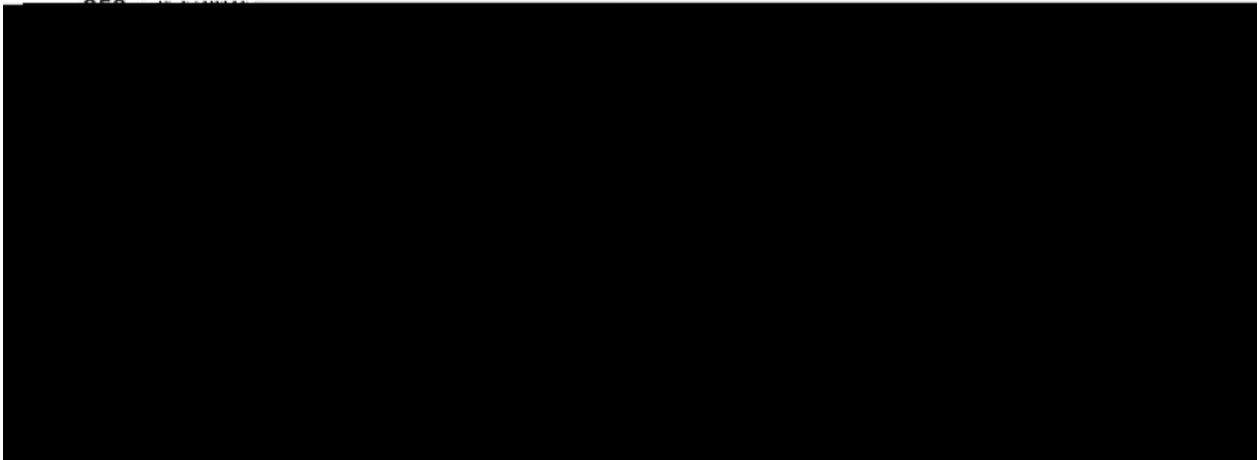
Note:

MUR860

Product Type.

****:

Lot No. Code, code change with Lot No.

Temperature Profile for IR Reflow Soldering(Pb-Free)

Note:

- | | | | |
|---|---------|-----------|---|
| 1 | 150 180 | 60 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | 2 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ REEL

| Package Type 封装形式 | Units 包装数量 | | | | | Dimension 包装尺寸 (unit: mm ³) | | |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|---|-------------|-------------|
| | Units/Reel 只/卷盘 | Reels/Inner Box 卷盘/盒 | Units/Inner Box 只/盒 | Inner Boxes/Outer Box 盒/箱 | Units/Outer Box 只/箱 | Reel | Inner Box 盒 | Outer Box 箱 |
| TO-277 | 5,000 | 3 | 15,000 | 6 | 90,000 | 13 ×12 | 360×360×50 | 380×335×366 |