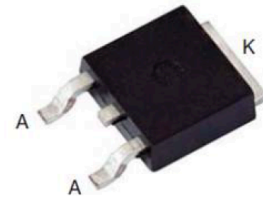


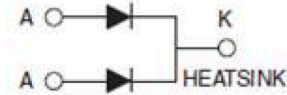
Features

- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Metal of silicon rectifier, majority carrier conduction
- Low forward voltage, high efficiency
- Guarding for over voltage protection

TO-252 (D-PAK)



Package: TO-252(D-PAK)



Mechanical Data

- Case: Epoxy, Molded
- Weight: 0.4grams (approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 sec
- Shipped 2500 units per reel

Maximum Ratings & Electrical Characteristics

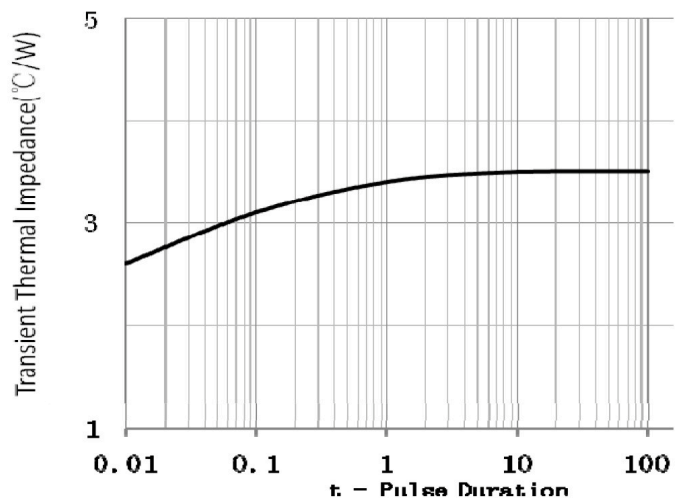
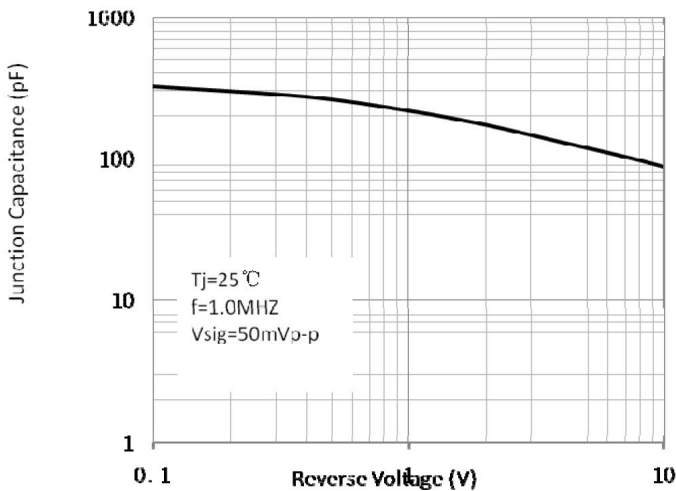
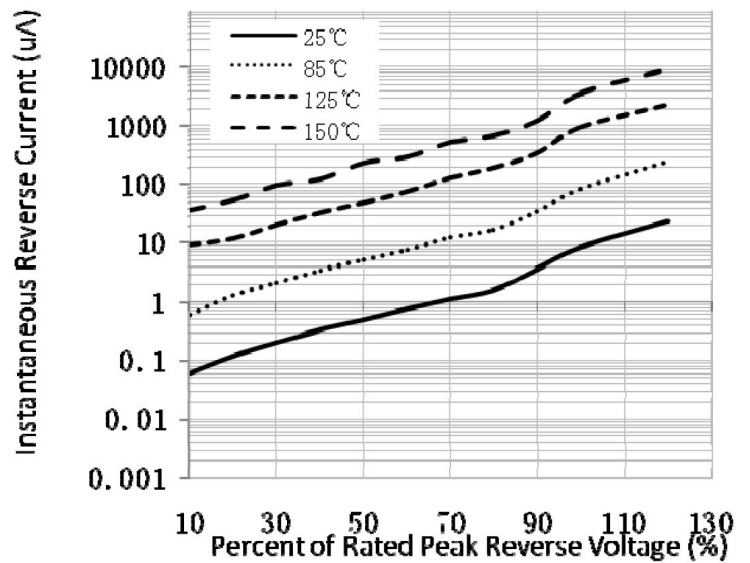
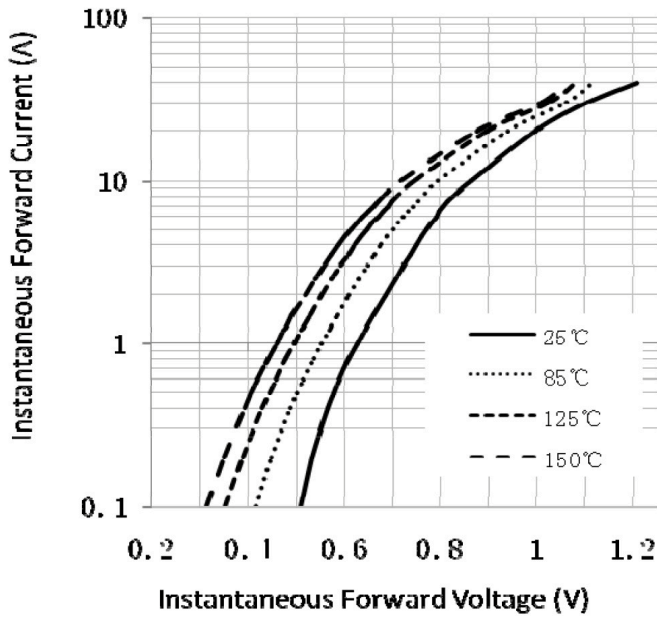
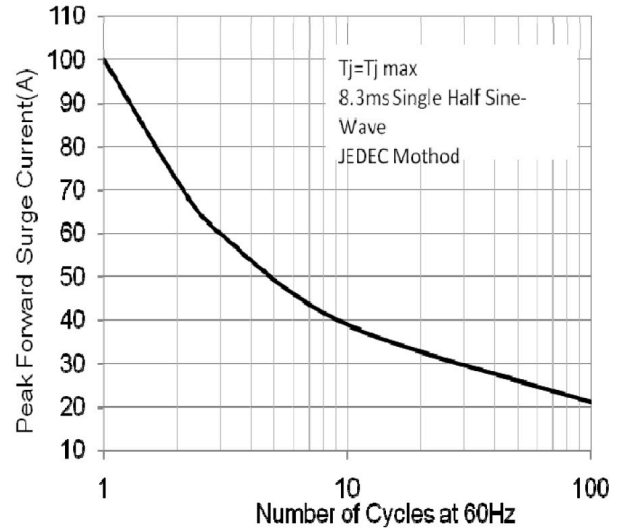
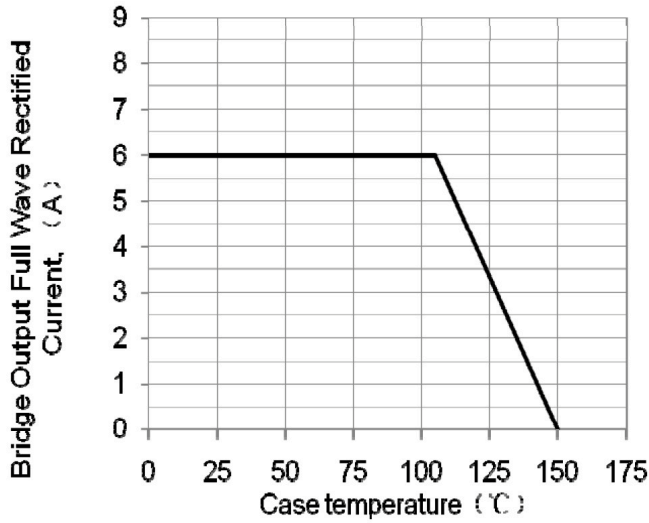
(T_A=25°C unless otherwise noted)

| PARAMETER | TEST CONDITIONS | | SYMBOL | MBRD6100CT | UNIT |
|---|---|---|---------------------|--------------|-------------|
| Maximum repetitive peak reverse voltage | | | V _{RRM} | 100 | V |
| Working peak reverse voltage | | | V _{RWM} | 100 | V |
| Maximum DC blocking voltage | | | V _{DC} | 100 | V |
| Maximum average forward rectified current at T _c =105°C total device per diode | | | I _{F(AV)} | 6 3 | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode | | | I _{FSM} | 100 | A |
| Peak repetitive reverse current per leg at t _p =2.0us ,1KHz | | | I _{RRM} | 1.0 | A |
| Voltage rate of change (rated V _R) | | | DV/dt | 10000 | V/us |
| Operating junction temperature range | | | T _J | -55 to+150 | °C |
| Storage temperature range | | | T _{STG} | -55 to+150 | °C |
| Maximum instantaneous forward voltage per leg | I _F =3A I _F =3A | T _C =25°C T _C =125°C | V _F | 0.76 0.70 | V |
| Maximum reverse current per leg at working peak Reverse voltage | T _J =25°C T _J =100°C | | I _R | 50 5 | uA mA |
| Thermal Characteristics T_A=25°C unless otherwise noted | | | | | |
| Symbol | Parameter | | TYP (TO-252) | | Unit |
| RθJC | Thermal Resistance, Junction to Case per Leg | | 3.5 | | °C /W |
| RθJA | Thermal Resistance, Junction to Ambient per Leg | | 62.5 | | °C /W |

Note: Pulse test:300us pulse width, duty cycle=2%

Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)



Package Outline Dimensions

Unit: millimeters

TO-252(D-PAK)

