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MBR10100CT

10.0 AMPS. Schottky Barrier Rectifiers

产 品 规 格 书

承 认 书

客户确认：

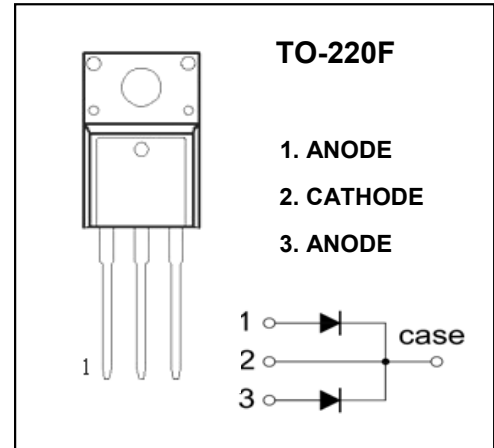
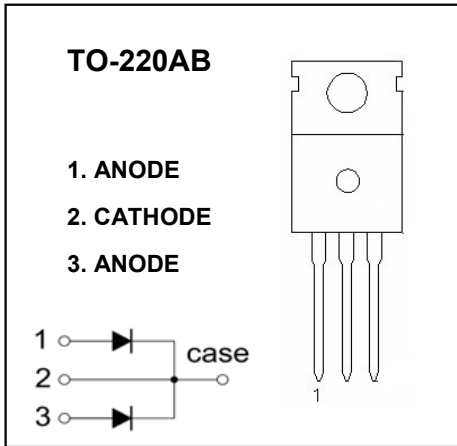
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| 签名 | | | |
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MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

| Symbol | Parameter | Value | Unit |
|-----------------|---|----------|---------------------------|
| V_{RRM} | Peak repetitive reverse voltage | 100 | V |
| V_{RWM} | Working peak reverse voltage | | |
| V_R | DC blocking voltage | | |
| $V_{R(RMS)}$ | RMS reverse voltage | 70 | V |
| I_O | Average rectified output current | 10 | A |
| I_{FSM} | Non-Repetitive peak forward surge current 8.3ms half sine wave | 120 | A |
| P_D | Power dissipation | 2 | W |
| $R_{\theta JA}$ | Thermal resistance from junction to ambient | 50 | $^\circ\text{C}/\text{W}$ |
| T_j | Junction temperature | 125 | $^\circ\text{C}$ |
| T_{stg} | Storage temperature | -55~+150 | $^\circ\text{C}$ |

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|---------------------------|------------|--------------------------------|-----|-----|------|------|
| Reverse voltage | $V_{(BR)}$ | $I_R=0.1\text{mA}$ | 100 | | | V |
| Reverse current | I_R | $V_R=150\text{V}$ | | | 0.1 | mA |
| Forward voltage | V_{F1} | $I_F=5\text{A}$ | | | 0.85 | V |
| | V_{F2}^* | $I_F=10\text{A}$ | | | 0.95 | V |
| Typical total capacitance | C_{tot} | $V_R=5\text{V}, f=1\text{MHz}$ | | 150 | | pF |

MBR1030CT-MBR10200CT

FIG.1- FORWARD CURRENT DERATING CURVE

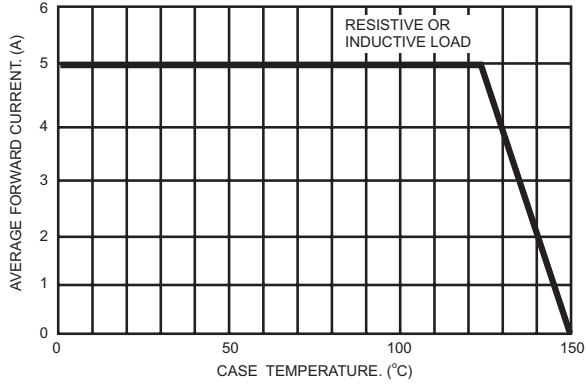


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

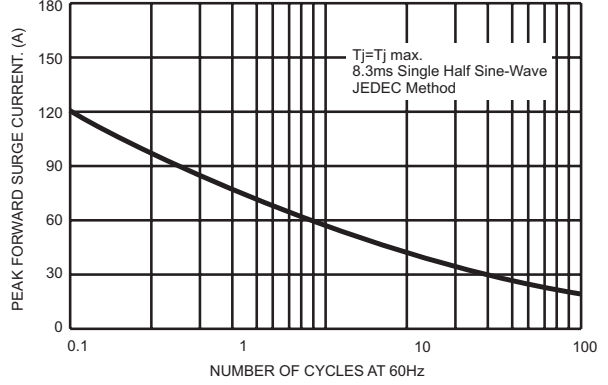


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

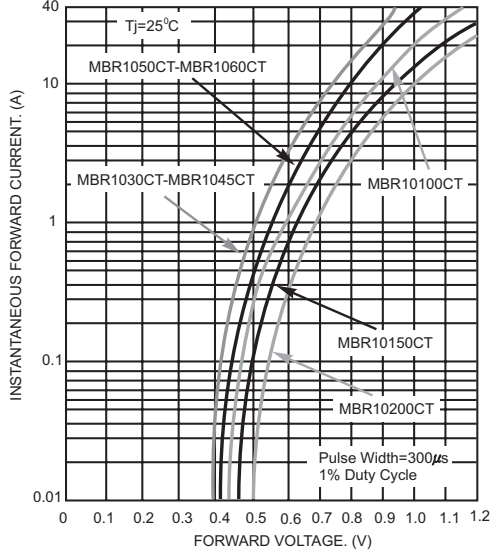


FIG.4- TYPICAL REVERSE CHARACTERISTICS

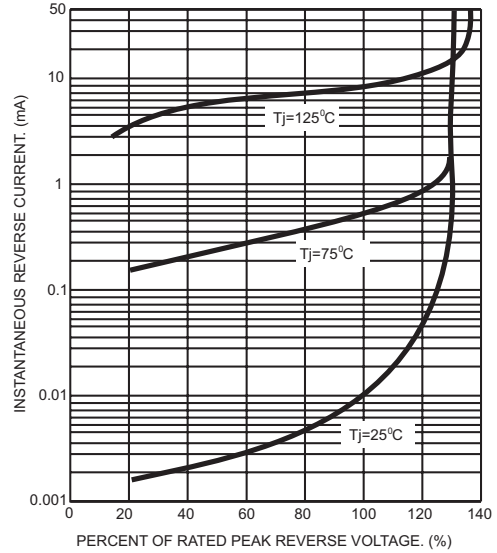


FIG.5- TYPICAL JUNCTION CAPACITANCE

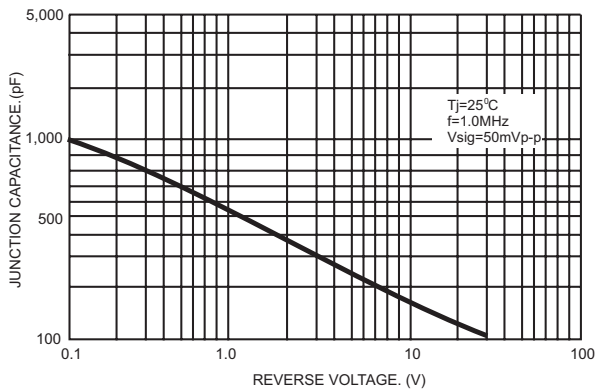


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS PER LEG

