



enhanced mechanical strength and moisture resistance
Guard ring for enhanced rugged rating, RoHS-compliant



Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102

Polarity: As marked

Maximum Ratings (T_a=25 Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | MBRL30100FCT |
|--|------------------|------------------|--------------|
| Device marking code | | | MBRL30100FCT |
| Repetitive Peak Reverse Voltage | VRRM | V | 100 |
| Average Rectified Output Current @60Hz sine wave, R-load, T _a =25 | I _O | A | 30 |
| Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, T _a =25 | IFSM | A | 200 |
| Current Squared Time @1ms t<8.3ms T _j =25 | I ² t | A ² s | 167 |
| Storage Temperature | T _{stg} | | -55 ~ +150 |
| Junction Temperature | T _j | | -55 ~ +150 |

Electrical Characteristics T_a=25 Unless otherwise specified

| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | MBRL30100FCT |
|---|-------------------|------|---------------------------------|--------------|
| Maximum instantaneous forward voltage drop per diode | VFM | V | IFM=15.0A | 0.72 |
| Maximum DC reverse current at rated DC blocking voltage per diode | I _{RRM1} | mA | VRM=VRRM T _a =25 | 0.1 |
| | I _{RRM2} | | VRM=VRRM T _a =100 | 20 |

Note1:Pulse test:300uS pulse width,1% duty cycle

Note2:Pulse test:pulse width 40mS



MBRL30100FCT

Thermal Characteristics $T_a=25$ Unless otherwise specified

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|-----------|--------|------|--------------|
|-----------|--------|------|--------------|

| | | | |
|--------------------|---------------------------|--|--|
| Thermal Resistance | Between junction and case | | |
|--------------------|---------------------------|--|--|



Outline Dimensions

| ITO-220AB | | |
|-----------|-------|-------|
| Dim | Min | Max |
| A | 9.8 | 10.2 |
| B | 2.25 | 2.75 |
| C | 2.95 | 3.45 |
| D | 14.75 | 15.25 |
| E | 3.05 | 3.95 |
| F | 0.45 | 0.75 |
| G | 0.45 | 0.75 |
| H | 13.4 | 14.2 |

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