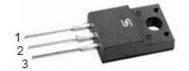




Dual Common Cathode Schottky Rectifier

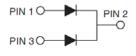
FEATURES

- Low power loss, high efficiency
- Guardring for overvoltage protection
- High surge current capability
- UL Recognized File # E-326243
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition





ITO-220AB





Version: H13

MECHANICAL DATA

Case: ITO-220AB

Molding compound, UL flammability classification rating 94V-0 Base P/N with suffix "G" on packing code - halogen-free Base P/N with prefix "H" on packing code - AEC-Q101 qualified **Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

with prefix "H" on packing code meet JESD 201 class 2 whisker test

Polarity: As marked

Mounting torque: 5 in-lbs maximum **Weight:** 1.7 g (approximately)

| MAXIMUM RATINGS AND ELECTRICAL CHAR | RACTERISTIC | CS (T _A =25°C unl | less otherwise no | oted) | |
|---|--------------------|------------------------------|------------------------------|----------|------|
| PARAMETER | SYMBOL | MBRF | MBRF | MBRF | UNIT |
| PARAIVIETER | SYMBOL | 10H100CT | 10H150CT | 10H200CT | |
| Maximum repetitive peak reverse voltage | V_{RRM} | 100 | 150 | 200 | V |
| Maximum RMS voltage | V_{RMS} | 70 | 105 | 140 | V |
| Maximum DC blocking voltage | V_{DC} | 100 | 150 | 200 | V |
| Maximum average forward rectified current | I _{F(AV)} | 10 | | | Α |
| Peak repetitive forward current (Rated VR, Square wave, 20KHz) | I _{FRM} | 10 | | | А |
| Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load | I _{FSM} | 120 | | | Α |
| Peak repetitive reverse surge current (Note 1) | I _{RRM} | | 1 | 0.5 | Α |
| Maximum instantaneous forward voltage (Note 2) | | | | | |
| I_F = 5 A, T_J =25 $^{\circ}$ C | | 0.85 | 0.88 0.75 0.97 0.85 | | |
| I _F = 5 A, T _J =125°℃ | V_{F} | 0.75 | | | V |
| I _F = 10 A, T _J =25°℃ | | 0.95 | | | |
| I _F = 10 A, T _J =125°C | | 0.85 | | | |
| Maximum reverse current @ rated VR | | | | | |
| T _J =25 ℃ | I _R | 5 | | | μA |
| T _J =125 ℃ | | 1 | | mA | |
| Voltage rate of change (Rated V _R) | dV/dt | 10000 | | | V/µs |
| Typical thermal resistance | $R_{	heta JC}$ | 3.5 | | °C/W | |
| Operating junction temperature range | T _J | - 55 to +175 | | οС | |
| Storage temperature range | T _{STG} | - 55 to +175 | | | οС |

Note 1: tp = 2.0 μs, 1.0KHz

Note 2: Pulse test with PW=300µs, 1% duty cycle

Document Number: DS_D1309015



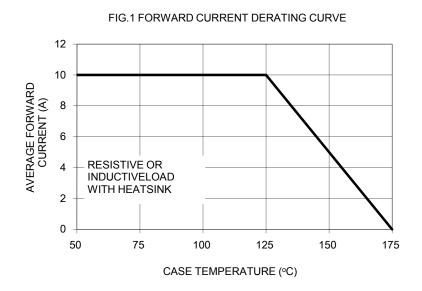
| ORDERING INFORMATION | | | | | | |
|--------------------------|------------|--------------|----------------|-----------|-----------|--|
| PART NO. | AEC-Q101 | PACKING CODE | GREEN COMPOUND | PACKAGE | PACKING | |
| | QUALIFIED | | CODE | | | |
| MBRF10HxxxCT (Note 1) | Prefix "H" | C0 | Suffix "G" | ITO-220AB | 50 / Tube | |

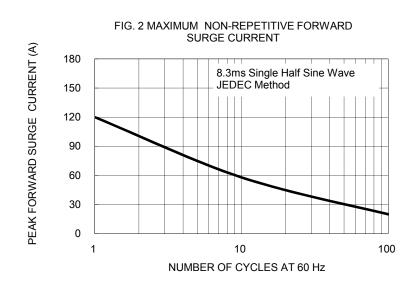
Note 1: "xxx" defines voltage from 100V (MBRF10H100CT) to 200V (MBRF10H200CT)

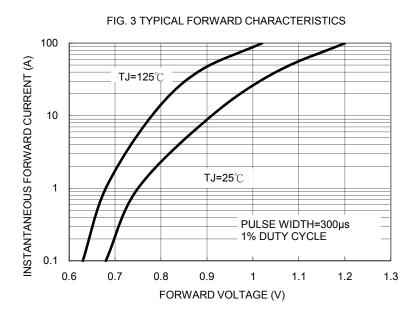
| EXAMPLE | | | | | | |
|------------------|--------------|-----------|--------------|----------------|--------------------|--|
| PREFERRED P/N | PART NO. | AEC-Q101 | PACKING CODE | GREEN COMPOUND | DESCRIPTION | |
| | | QUALIFIED | | CODE | DESCRIPTION | |
| MBRF10H100CT C0 | MBRF10H100CT | | C0 | | | |
| MBRF10H100CT C0G | MBRF10H100CT | | C0 | G | Green compound | |
| MBRF10H100CTHC0 | MBRF10H100CT | Н | C0 | | AEC-Q101 qualified | |

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)







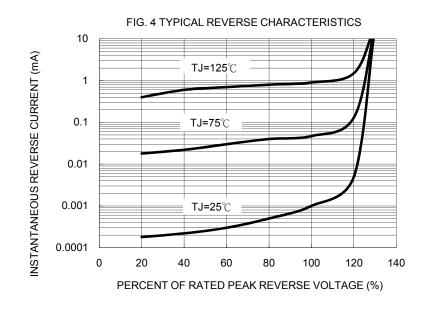
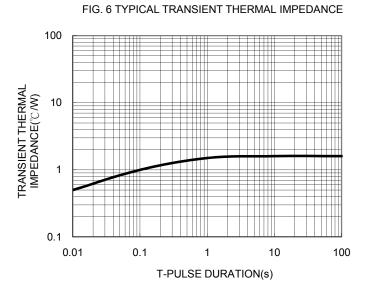
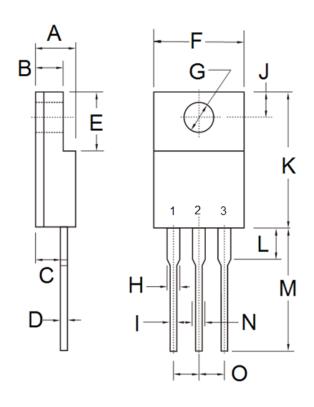




FIG. 5 TYPICAL JUNCTION CAPACITANCE 1000 900 800 JUNCTION CAPACITANCE (pF) 700 600 500 400 300 200 100 0.1 10 100 1 REVERSE VOLTAGE (V)



PACKAGE OUTLINE DIMENSIONS



| DIM. | Unit | (mm) | Unit (inch) | | |
|--------|-------|-------|-------------|-------|--|
| Dilvi. | Min | Max | Min | Max | |
| Α | 4.30 | 4.70 | 0.169 | 0.185 | |
| В | 2.50 | 3.16 | 0.098 | 0.124 | |
| С | 2.30 | 2.96 | 0.091 | 0.117 | |
| D | 0.46 | 0.76 | 0.018 | 0.030 | |
| Е | 6.30 | 6.90 | 0.248 | 0.272 | |
| F | 9.60 | 10.30 | 0.378 | 0.406 | |
| G | 3.00 | 3.40 | 0.118 | 0.134 | |
| Н | 0.95 | 1.45 | 0.037 | 0.057 | |
| 1 | 0.50 | 0.90 | 0.020 | 0.035 | |
| J | 2.40 | 3.20 | 0.094 | 0.126 | |
| K | 14.80 | 15.50 | 0.583 | 0.610 | |
| L | - | 4.10 | - | 0.161 | |
| М | 12.60 | 13.80 | 0.496 | 0.543 | |
| N | - | 1.80 | - | 0.071 | |
| 0 | 2.41 | 2.67 | 0.095 | 0.105 | |

MARKING DIAGRAM



P/N = Specific Device Code G = Green Compound

YWW = Date Code F = Factory Code

Document Number: DS_D1309015





Taiwan Semiconductor

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CDBQC0240LR-HF ACDBA340-HF ACDBA260LR-HF ACDBA1100-HF SK310B-TP MA4E2502L-1246 MA4E2502H-1246

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