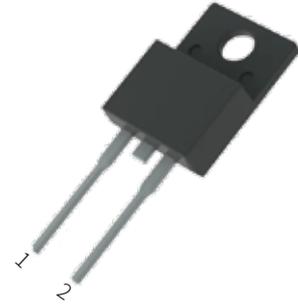


FEATURES

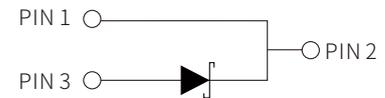
- | Construction Utilizes Void-free Molded Plastic Technique
- | Low Reverse Leakage
- | High Forward Surge Current Capability



ITO-220AC

MECHANICAL DATA

- | Case : Molded Plastic Body
- | Polarity : Polarity Symbol Marking on Body
- | Mounting Position : Any



Schematic Symbol

APPROVALS

| | |
|-------------|------------------------------------|
| RoHS | Compliance with 2011/65/EU |
| HF | Compliance with IEC61249-2-21:2003 |

MAXIMUM RATINGS (T_A=25°C)

| Parameter | Symbol | ER 15U05F | ER 15U10F | ER 15U20F | ER 15U40F | ER 15U50F | ER 15U60F | Unit | |
|--|-------------------|-----------------------|-----------|-----------|-----------|-----------|-----------|------|----|
| | | ER 15U05F | ER 15U10F | ER 15U20F | ER 15U40F | ER 15U50F | ER 15U60F | | |
| Marking | | ER 15U05F | ER 15U10F | ER 15U20F | ER 15U40F | ER 15U50F | ER 15U60F | | |
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 500 | 600 | V | |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 350 | 420 | V | |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 500 | 600 | V | |
| Maximum Average Forward Rectified Current At T _c =110°C | I _(AV) | 15.0 | | | | | | A | |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load | I _{FSM} | 200 | | | | | | A | |
| Maximum Instantaneous Forward Voltage at 15.0A | V _F | 1.0 | | 1.3 | | 1.7 | | V | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I _R | T _A =25°C | | | | | | 10 | μA |
| | | T _A =125°C | | | | | | 500 | μA |
| Maximum reverse recovery time | T _{rr} | 35 | | | | | | ns | |
| Typical Thermal Resistance | R _{θJC} | 3.5 | | | | | | °C/W | |
| Operating Junction Temperature Range | T _J | -55 to +150 | | | | | | °C | |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | | °C | |

 Note:1.Reverse recovery time test condition: I_F=0.5A I_R=1.0A I_{rr}=0.25A

CHARACTERISTIC CURVES

Fig.1 -Derating Curve Output Rectified Current

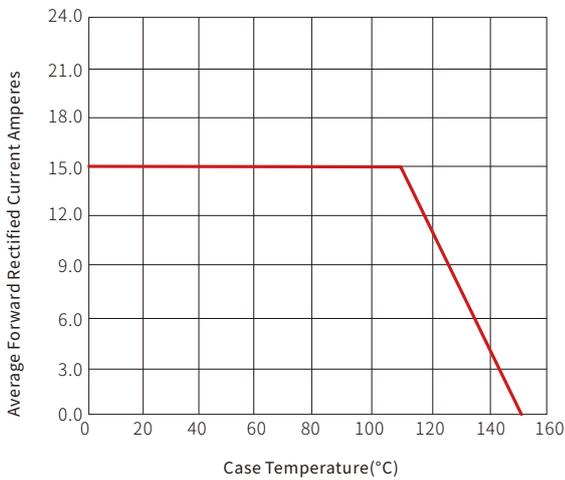


Fig.2 -Maximum Non-repetitive Peak Forward Surge Current Perleg

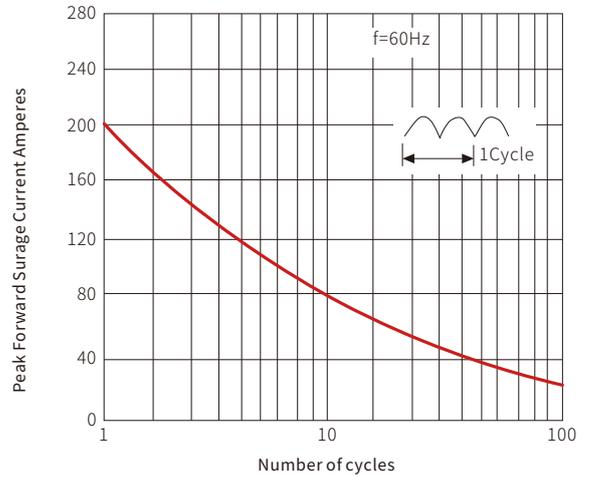


Fig.3 -Typical Forward Voltage Characteristics

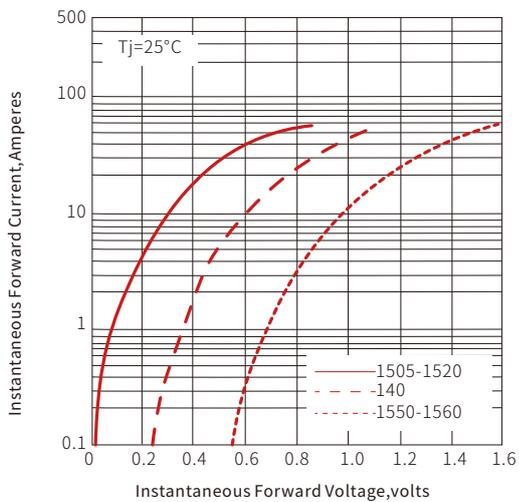
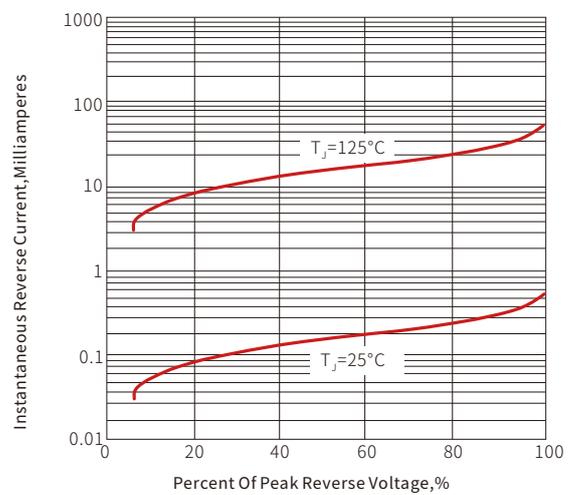
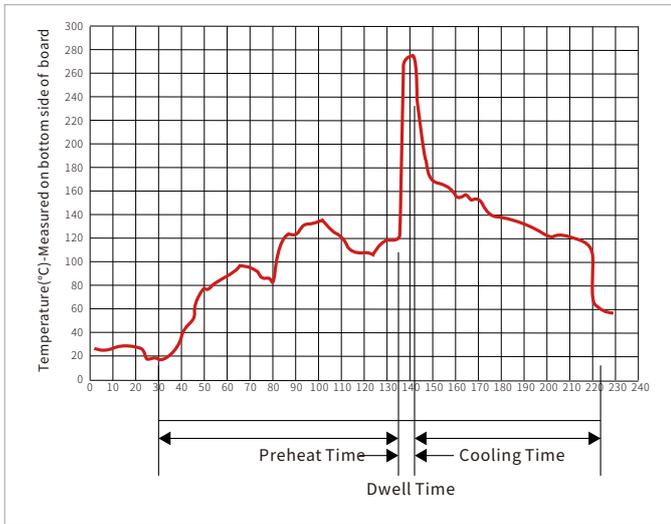


Fig.4 -Typical Reverse Leakage Characteristics

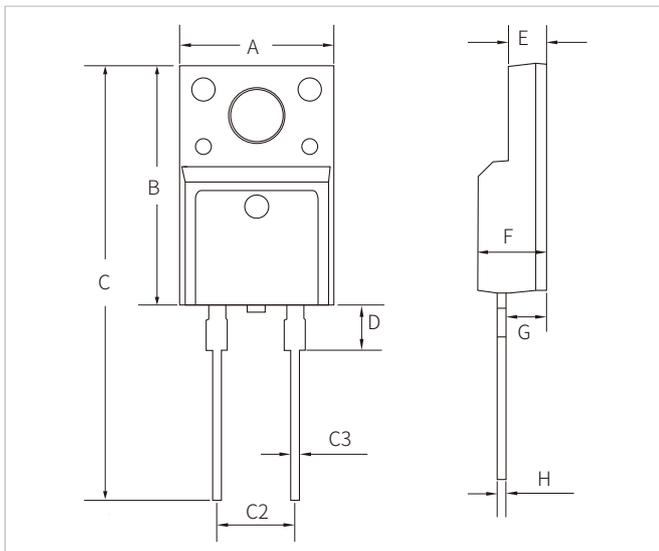


WAVE SOLDERING



| Wave Parameter | | Lead-free assembly |
|------------------------|------------------|--------------------|
| Pre Heat | Temperature Min | 100°C |
| | Temperature Max | 150°C |
| | Time(min to max) | 60 – 180 secs |
| Solder pot Temperature | | 280°C Max |
| Solder Dwell Time | | 2-5 seconds |

ITO-220AC PACKAGE MECHANICAL DATA



| Ref. | Dimensions | | | |
|------|-------------|------|--------|-------|
| | Millimeters | | Inches | |
| | Min. | Max. | Min. | Max. |
| A | - | 10.7 | - | 0.421 |
| B | 15.0 | 16.5 | 0.590 | 0.649 |
| C | 27.0 | 30.0 | 1.063 | 1.181 |
| C2 | 4.0 | 6.0 | 0.160 | 0.240 |
| C3 | 0.4 | 0.8 | 0.016 | 0.031 |
| D | 2.5 | 4.0 | 0.098 | 0.155 |
| E | 2.30 | 3.00 | 0.090 | 0.118 |
| F | 4.00 | 5.10 | 0.155 | 0.200 |
| G | 2.14 | 3.19 | 0.084 | 0.126 |
| H | 0.4 | 0.8 | 0.016 | 0.031 |

ORDERING INFORMATION

| Part Number | Component Package | QTY/Tube | QTY/Box | QTY/Carton |
|-------------------|-------------------|----------|---------|------------|
| ER15U05F-ER15U60F | ITO-220AC | 50PCS | 1000PCS | 5000PCS |

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