



## JSPF20150ACT 20A Schottky Barrier Rectifier

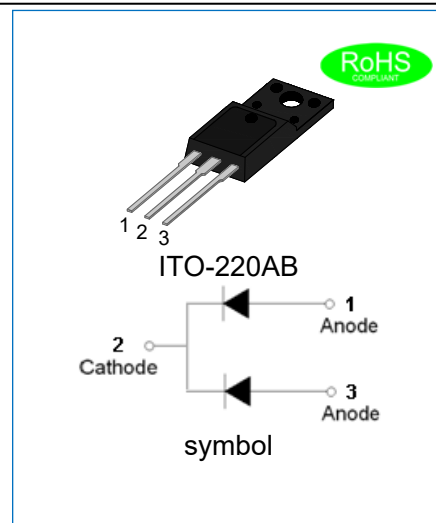
Rev.3.4

### DESCRIPTION

- ✧ Plastic package has underwriters laboratories flammability classification 94V-0
- ✧ Lead free in compliance with EU RoHS 2011/65/EU directive
- ✧ Low forward voltage drop
- ✧ Low power losses, high efficiency operation
- ✧ High current capability and surge capability

### MECHANICAL DATA

- ✧ Case: ITO-220AB molded plastic
- ✧ Terminals: Solder plated, solderable per J-STD-002



### ABSOLUTE MAXIMUM RATING (Rating at 25°C ambient temperature unless otherwise specified.)

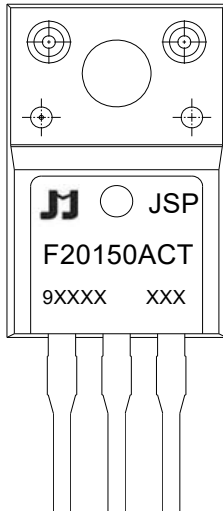
| Parameter  | Symbol      | JSPF20150ACT | Unit |
|--|-------------|--------------|------|
| Maximum repetitive peak reverse voltage  | $V_{RRM}$   | 150          | V    |
| Maximum RMS voltage  | $V_{RMS}$   | 105          | V    |
| Maximum DC blocking voltage  | $V_{DC}$    | 150          | V    |
| Maximum average forward current  | $I_{F(AV)}$ | 20           | A    |
| Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load | $I_{FSM}$   | 150          | A    |
| Operating junction temperature range   | $T_j$       | -55 to +150  | °C   |
| Storage temperature range  | $T_{stg}$   | -55 to +150  | °C   |

### ELECTRICAL CHARACTERISTICS (Rating at 25°C ambient temperature unless otherwise specified.)

| Parameter                                    | Symbol                      | Min | Typ | Max  | Unit |
|--|-----------------------------|-----|-----|------|------|
| Forward voltage                              | $I_F=10A$<br>$V_F$          |     |     | 0.95 | V    |
| Reverse current at rated DC blocking voltage | $T_A=25^\circ C$<br>$I_R$   |     |     | 0.1  | mA   |
|  | $T_A=100^\circ C$           |     |     | 20   |      |
| Junction capacitance                         | $V_R=4.0V, f=1MHz$<br>$C_J$ |     | 300 |      | pF   |

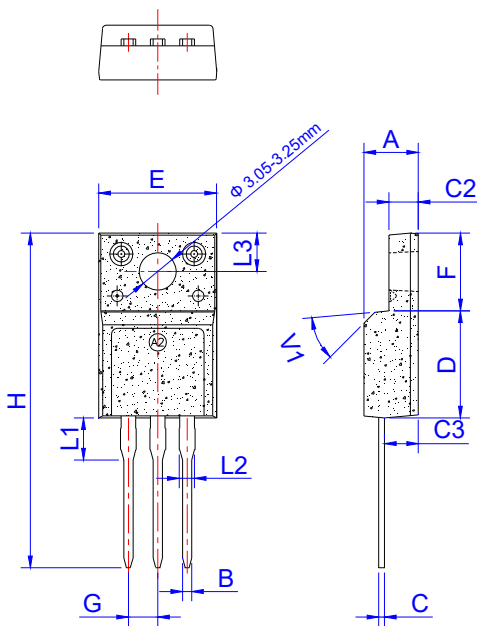
**THERMAL RESISTANCES**

| Symbol        | Parameter                                | JSPF20150ACT | Unit |
|---------------|--|--------------|------|
| $R_{th(j-c)}$ | Thermal resistance from junction to case | 3.0          | °C/W |

**MARKING**


|     |                            |
|-----|----------------------------|
| JS  | Schottky Barrier Rectifier |
| P   | Planar technology          |
| F   | Package: ITO-220AB         |
| 20  | $I_{F(AV)}=20A$            |
| 150 | $V_{RRM}:150V$             |
| A   | Version                    |
| CT  | Common cathode             |

|     |                                |
|-----|--------------------------------|
| 9   | Year code(8:2018,9:2019,.....) |
| XX  | Week code                      |
| XX  | Chip code                      |
| XXX | Package lot number             |

**PACKAGE MECHANICAL DATA**


ITO-220AB

| Ref. | Dimensions  |      |      |        |       |       |
|------|-------------|------|------|--------|-------|-------|
|      | Millimeters |      |      | Inches |       |       |
|      | Min.        | Typ. | Max. | Min.   | Typ.  | Max.  |
| A    | 4.50        |      | 4.90 | 0.177  |       | 0.193 |
| B    | 0.74        | 0.80 | 0.83 | 0.029  | 0.031 | 0.033 |
| C    | 0.47        |      | 0.65 | 0.019  |       | 0.026 |
| C2   | 2.45        |      | 2.75 | 0.096  |       | 0.108 |
| C3   | 2.60        |      | 3.00 | 0.102  |       | 0.118 |
| D    | 8.80        |      | 9.30 | 0.346  |       | 0.366 |
| E    | 9.80        |      | 10.4 | 0.386  |       | 0.410 |
| F    | 6.40        |      | 6.80 | 0.252  |       | 0.268 |
| G    | 2.40        |      | 2.70 | 0.094  |       | 0.106 |
| H    | 28.0        |      | 29.8 | 1.102  |       | 1.173 |
| L1   |             | 3.63 |      |        | 0.143 |       |
| L2   | 1.14        |      | 1.70 | 0.045  |       | 0.067 |
| L3   |             | 3.30 |      |        | 0.130 |       |
| V1   |             | 45°  |      |        | 45°   |       |



**PACKAGE INFORMATION-ITO-220AB**

| OUTLINE | UNIT WEIGHT<br>(g/PCS) typ. | TUBE<br>(PCS) | PER CARTON<br>(PCS) |
|---------|-----------------------------|---------------|---------------------|
| TUBE    | 2.10                        | 50            | 5,000               |

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