



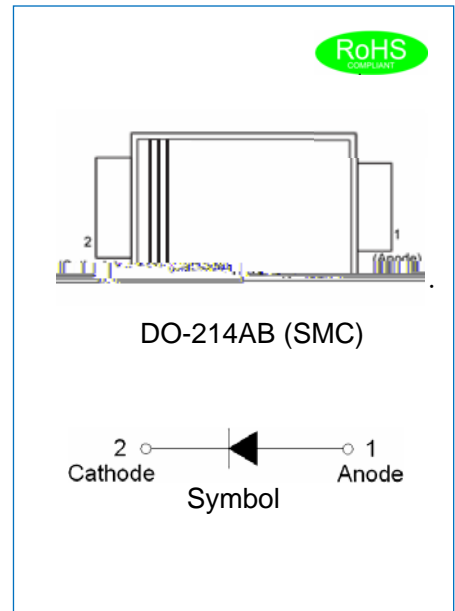
## JSPJ5150A

### 5A Schottky Barrier Rectifier

Rev.1.2

#### DESCRIPTION

- Plastic package has underwriters laboratories flammability classification 94V-0
- For surface mounted applications in order to optimize board space
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Ultra low forward voltage drop
- Low power losses, high efficiency operation
- High current capability and surge capability
- Low thermal resistance package



#### MECHANICAL DATA

- Case: SMC molded plastic
- Terminals: Solder plated, solderable per J-STD-002
- Polarity: Color band denotes cathode end

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

| Parameter  | Symbol      | JSPJ5150A   | 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  | $I_{F(AV)}$ | 5.0         | A    |
| Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load | $I_{FSM}$   | 120         | A    |
| Operating junction temperature range   | $T_j$       | -55 to +150 |      |
| Storage temperature range  | $T_{stg}$   | -55 to +150 |      |

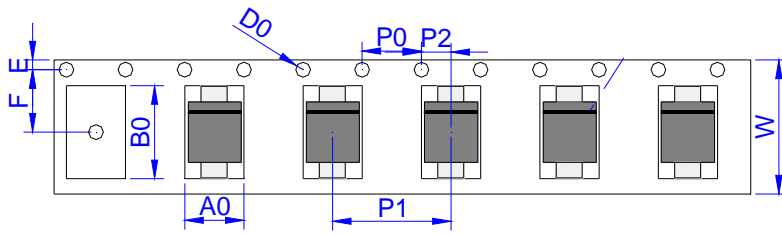
#### ELECTRICAL CHARACTERISTICS (Rating at 25 ambient temperature unless otherwise specified.)

| Parameter                                  | Symbol | Min | Typ  | Max | Unit |
|--|--------|-----|------|-----|------|
| Forward voltage<br>$I_F=5A$                | $V_F$  |     | 0.90 |     | V    |
| Junction capacitance<br>$V_R=4.0V, f=1MHz$ | $C_J$  |     | 200  |     | pF   |





TAPE AND REEL SPECIFICATION-SMC





### CHARACTERISTICS CURVE

FIG.3: Maximum non-repetitive peak forward surge current

FIG.4: Forward current derating curve

