



JSPC20200ACT-CO

20A Schottky Barrier Rectifier

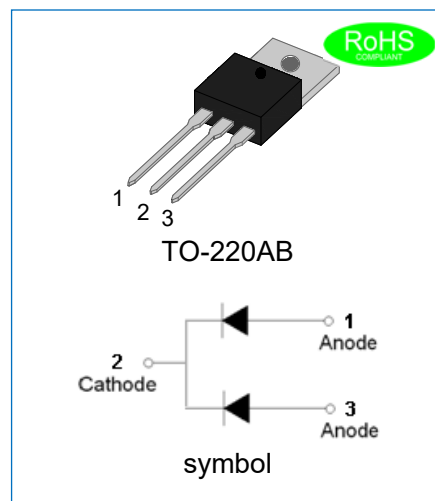
Rev.0.1

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: TO-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 | JSPC20200ACT-CO | Unit |
|--|-------------|-----------------|------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 200 | V |
| Maximum RMS voltage | V_{RMS} | 140 | V |
| Maximum DC blocking voltage | V_{DC} | 200 | 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.)

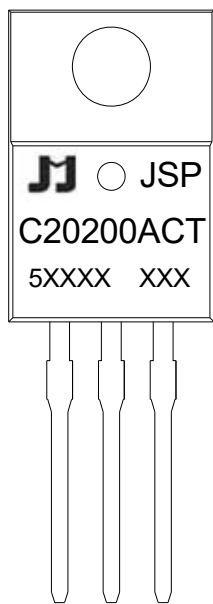
| Parameter | | Symbol | Min | Typ | Max | Unit |
|----------------------|------------------------------|--------|-----|-----|------|------|
| Forward voltage | $I_F=10A$ | V_F | | | 0.95 | V |
| Reverse current | $V_R=200V, T_A=25^{\circ}C$ | I_R | | | 0.1 | mA |
| | $V_R=200V, T_A=100^{\circ}C$ | | | | 20 | |
| Junction capacitance | $V_R=4.0V, f=1MHz$ | C_J | | 300 | | pF |

THERMAL RESISTANCES

| Symbol | Parameter | JSPC20200ACT-CO | Unit |
|---------------|--|-----------------|------|
| $R_{th(j-c)}$ | Thermal resistance from junction to case | 2.0 | °C/W |



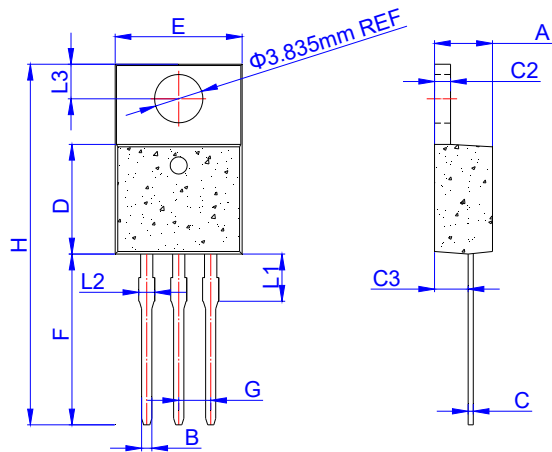
MARKING



| | |
|-----|----------------------------|
| JS | Schottky Barrier Rectifier |
| P | Planar technology |
| C | Package: TO-220AB |
| 20 | $I_{F(AV)}=20A$ |
| 200 | $V_{RRM}:200V$ |
| A | Version |
| CT | Common cathode |

| | |
|-----|-----------------------------|
| 5 | Year code(4:2024,5:2025,……) |
| XX | Week code |
| XX | Chip code |
| XXX | Package lot number |

PACKAGE MECHANICAL DATA



TO-220AB

| Ref. | Dimensions | | | | | |
|------|-------------|-------|-------|--------|-------|-------|
| | Millimeters | | | Inches | | |
| | Min. | Typ. | Max. | Min. | Typ. | Max. |
| A | 4.45 | 4.60 | 4.75 | 0.175 | 0.181 | 0.187 |
| B | 0.71 | 0.81 | 0.91 | 0.028 | 0.032 | 0.036 |
| C | 0.30 | 0.40 | 0.50 | 0.012 | 0.016 | 0.020 |
| C2 | 1.17 | 1.27 | 1.37 | 0.046 | 0.050 | 0.054 |
| C3 | 2.47 | 2.67 | 2.87 | 0.097 | 0.105 | 0.113 |
| D | 8.50 | 8.70 | 8.90 | 0.335 | 0.343 | 0.350 |
| E | 9.83 | 10.08 | 10.33 | 0.387 | 0.397 | 0.407 |
| F | 13.30 | 13.55 | 13.80 | 0.524 | 0.533 | 0.543 |
| G | | 2.54 | | | 0.100 | |
| H | 28.10 | 28.60 | 29.10 | 1.106 | 1.126 | 1.146 |
| L1 | 3.54 | 3.74 | 3.94 | 0.139 | 0.147 | 0.155 |
| L2 | 1.17 | 1.27 | 1.37 | 0.046 | 0.050 | 0.054 |
| L3 | | 2.74 | | | 0.108 | |

PACKAGE INFORMATION-TO-220AB

| | | | |
|---------|-----------------------------|---------------|---------------------|
| OUTLINE | UNIT WEIGHT (g/PCS) typ. | TUBE (PCS) | PER CARTON (PCS) |
| TUBE | 1.93 | 50 | 5,000 |



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