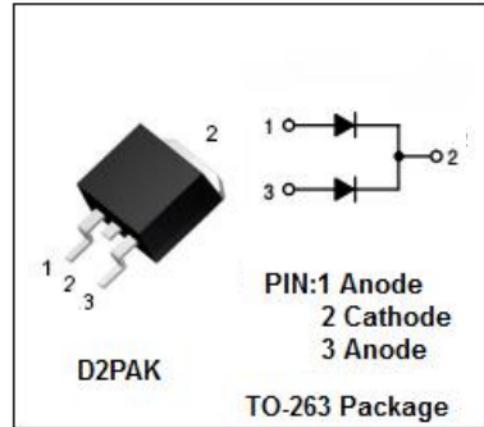


## Schottky Barrier Rectifier

**DSSK28-01AS**

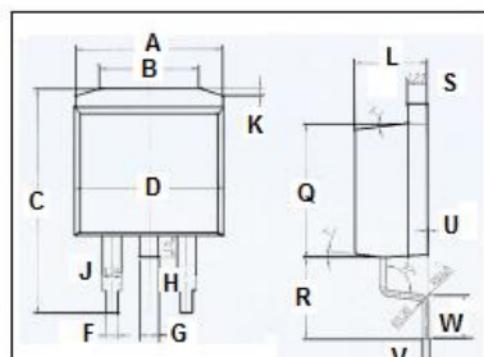
### FEATURES

- With TO-263 packaging
- High junction temperature capability
- Low forward voltage drop
- High current capability
- Low power loss, high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



### APPLICATIONS

- Switching power supply
- Free-Wheeling diodes
- Reverse battery protection
- Center tap configuration



### ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)

| SYMBOL             | PARAMETER   | VALUE   | UNIT |
|--------------------|---|---------|------|
| V <sub>RRM</sub>   | Peak Repetitive Reverse Voltage   |         |      |
| V <sub>RWM</sub>   | Working Peak Reverse Voltage  | 150     | V    |
| V <sub>R</sub>     | DC Blocking Voltage   |         |      |
| I <sub>F(AV)</sub> | Average Rectified Forward Current@T <sub>c</sub> =155°C   | 30      | A    |
| I <sub>FSM</sub>   | Nonrepetitive Peak Surge Current<br>( 8.3ms single half sine-wave superimposed on rated load conditions ) | 230     | A    |
| T <sub>J</sub>     | Junction Temperature  | 175     | °C   |
| T <sub>stg</sub>   | Storage Temperature Range   | -65~175 | °C   |

| DIM | mm    |       |
|-----|-------|-------|
|     | MIN   | MAX   |
| A   | 10    |       |
| B   | 6.6   | 6.8   |
| C   | 15.23 | 15.25 |
| D   | 10.15 | 10.17 |
| F   | 0.76  | 0.78  |
| G   | 1.26  | 1.28  |
| H   | 1.4   | 1.6   |
| J   | 1.33  | 1.35  |
| K   | 0.4   | 0.6   |
| L   | 4.6   | 4.8   |
| O   | 8.69  | 8.71  |
| R   | 5.28  | 5.30  |
| S   | 1.26  | 1.28  |
| U   | 0.0   | 0.2   |
| V   | 0.37  | 0.39  |
| W   | 2.80  | 2.82  |

**Schottky Barrier Rectifier****DSSK28-01AS****THERMAL CHARACTERISTICS**

| SYMBOL        | PARAMETER                            | MAX | UNIT |
|---------------|--------------------------------------|-----|------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 1.4 | °C/W |

**ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300  $\mu$ s, Duty Cycle  $\leq 1\%$ )

| SYMBOL | PARAMETER                             | CONDITIONS                         | MAX  | UNIT |
|--------|---------------------------------------|------------------------------------|------|------|
| $V_F$  | Maximum Instantaneous Forward Voltage | $I_F = 15A ; T_c = 25^\circ C$     | 0.79 | V    |
|        |                                       | $I_F = 15A ; T_c = 125^\circ C$    | 0.64 |      |
|        |                                       | $I_F = 30A ; T_c = 125^\circ C$    | 0.76 |      |
| $I_R$  | Maximum Instantaneous Reverse Current | $V_R = V_{RWM}, T_c = 25^\circ C$  | 0.5  | mA   |
|        |                                       | $V_R = V_{RWM}, T_c = 125^\circ C$ | 5    |      |