

# Schottky Barrier Rectifier

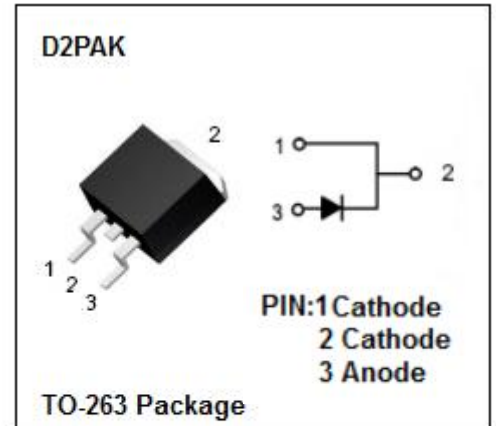
# SK1040D2

### FEATURES

- Schottky Barrier Chip
- Low Power Loss/High Efficiency
- High Surge Capability
- High Current Capability, Low Forward Voltage Drop
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

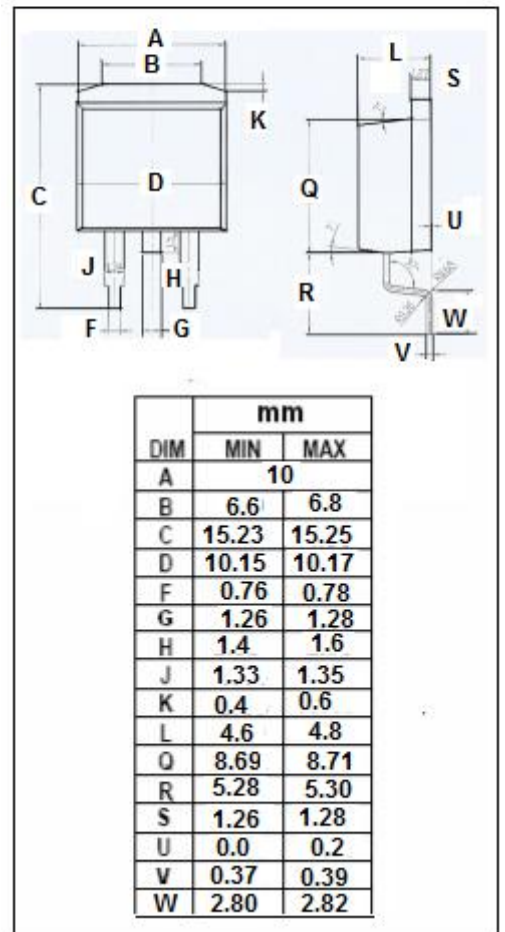
### APPLICATIONS

- Designed for low-voltage, high frequency inverters, free wheeling and polarity protection applications .



### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub>	Peak Repetitive Reverse Voltage	40	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	10	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	150	A
T <sub>J</sub>	Junction Temperature	-50~150	°C
T <sub>stg</sub>	Storage Temperature Range	-50~175	°C



### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.5	°C/W

**Schottky Barrier Rectifier**
**SK1040D2**
**ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300  $\mu$  s, Duty Cycle  $\leq$  1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F = 5A$ $I_F = 10A$	0.51 0.55	V
$I_R$	Maximum Instantaneous Reverse Current	$V_R = V_{RRM}, T_C = 25^\circ C$ $V_R = V_{RRM}, T_C = 100^\circ C$	0.31 45	mA


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