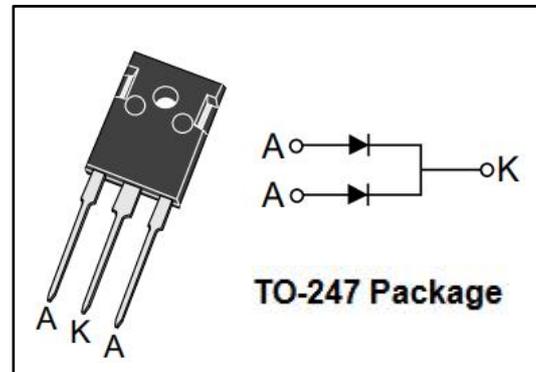


**Schottky Barrier Rectifier**
**DSSK60-0045A**
**FEATURES**

- Multilayer Metal -Silicon Potential Structure.
- Low Leakage Current.
- High Current Capability, High Efficiency.
- High Junction Temperature Capability
- RoHs Product.
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


**MECHANICAL CHARACTERISTICS**

- Low Voltage High Frequency Switching Power Supply.
- Low Voltage High Frequency Invers Circuit.
- Low Voltage Continued Circuit and Protection Circuit.

**ABSOLUTE MAXIMUM RATINGS(Ta=25°C)**

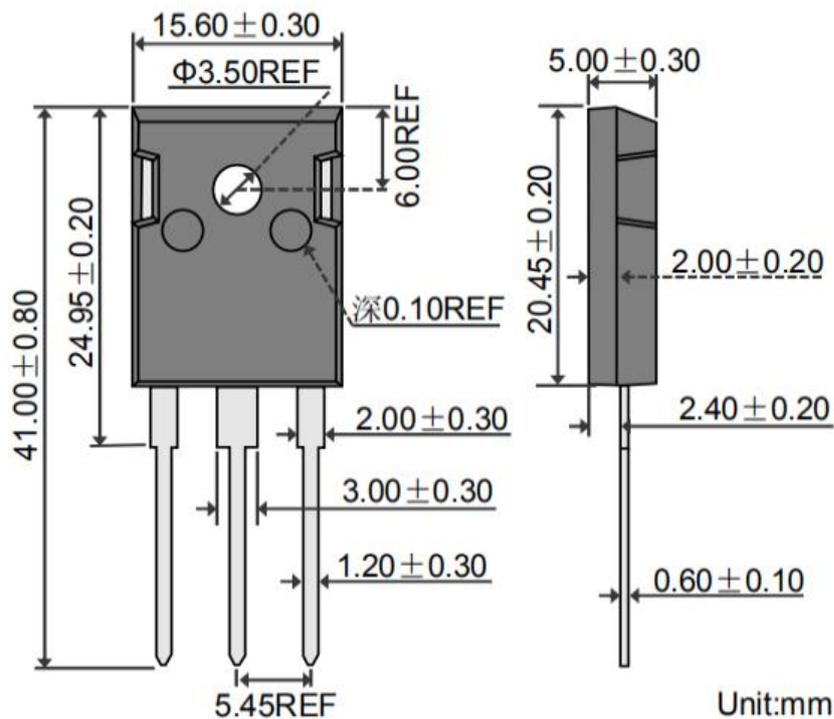
SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	45	V
I <sub>F(AV)</sub>	Average Rectified Forward Current (Rated V <sub>R</sub> -20Khz Square Wave) - 50% duty cycle	60	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	500	A
T <sub>J</sub>	Junction Temperature	-40~150	°C
T <sub>stg</sub>	Storage Temperature Range	-40~150	°C
dv/dt	Voltage Rate of Change (Rated V <sub>R</sub> )	10,000	V/μs

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.5	°C/W

**Schottky Barrier Rectifier**
**DSSK60-0045A**
**ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300  $\mu$  s, Duty Cycle $\leq$ 2.0%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>F</sub>	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 30A ; T <sub>c</sub> = 25 $^{\circ}$ C	0.61	V
		I <sub>F</sub> = 30A ; T <sub>c</sub> = 125 $^{\circ}$ C	0.58	
I <sub>R</sub>	Maximum Instantaneous Reverse Current	V <sub>R</sub> = V <sub>RWM</sub> ; T <sub>c</sub> = 25 $^{\circ}$ C	1.0	mA
		V <sub>R</sub> = V <sub>RWM</sub> ; T <sub>c</sub> = 125 $^{\circ}$ C	10	


**NOTICE:**

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications. ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.