

Schottky Barrier Rectifier

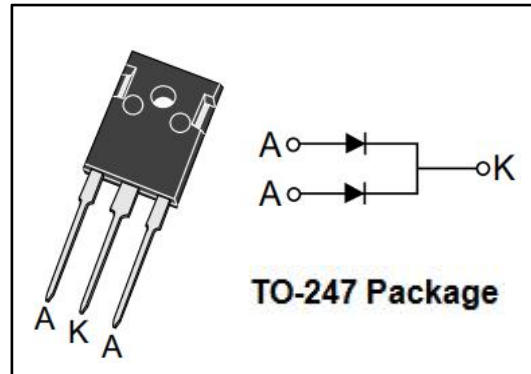
STPS6045CW

FEATURES

- Multilayer Metal -Silicon Potential Structure.
- Beautiful High Temperature Character.
- Have Over Voltage protect loop, high reliability.
- 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($T_a=25^{\circ}\text{C}$)

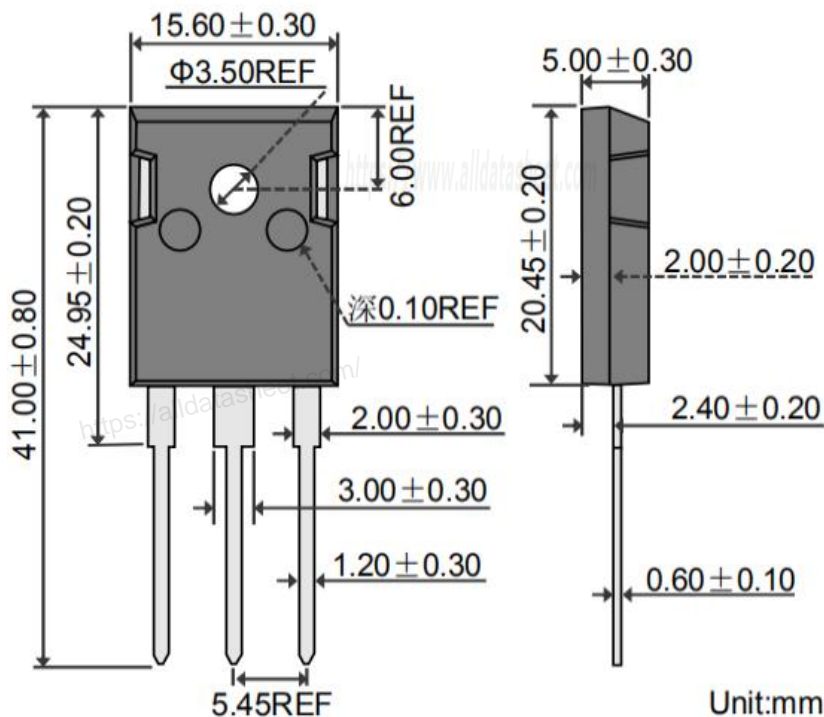
SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RMS} V_R	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	45	V
$I_{F(AV)}$	Average Rectified Forward Current (Per Leg) (Total)	30 60	A
I_{FSM}	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	400	A
dvdt	Maximum Rate of Voltage Change	10000	V/uS
T_J	Junction Temperature	-65~175	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65~175	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.95	$^{\circ}\text{C}/\text{W}$

Schottky Barrier Rectifier
STPS6045CW
ELECTRICAL CHARACTERISTICS(Pulse Test: Pulse Width \leq 300 μ s,Duty Cycle \leq 1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F= 60A ; T_C= 25^\circ C$	0.84	V
I_R	Maximum Instantaneous Reverse Current	Rated DC Voltage, $T_C= 25^\circ C$	0.5	mA


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.