

## **Schottky Barrier Rectifiers**

Using the Schottky Barrier principle with a Molybdenum barrier metal. These state-of-the-art geometry features epitaxial construction with oxide passivation and metal overlay contact. Ideally suited for low voltage, high frequency rectification, or as free wheeling and polarity protection diodes.

#### **Features**

- \* Low Forward Voltage.
- \* Low Switching noise.
- \* High Current Capacity
- \* Guarantee Reverse Avalanche.
- \* Guard-Ring for Stress Protection.
- \* Low Power Loss & High efficiency.
- \* 150 Operating Junction Temperature
- \* Low Stored Charge Majority Carrier Conduction.
- \* Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-O
- \* ESD: 8KV(Min.) Human-Body Model
- \* In compliance with EU RoHs 2002/95/EC directives



## **MAXIMUM RATINGS**

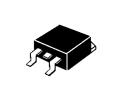
Characteristic	Symbol	S16S						l los is
Characteristic		30	35	40	45	50	60	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	30	35	40	45	50	60	>
RMS Reverse Voltage	V <sub>R(RMS)</sub>	21	25	28	32	35	42	V
Average Rectifier Forward Current Total Device (Rated V <sub>R</sub> ), T <sub>C</sub> =100	I <sub>F(AV)</sub>	8.0 16				А		
Peak Repetitive Forward Current (Rate V <sub>R</sub> , Square Wave, 20kHz)	I <sub>FM</sub>	16			А			
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	I <sub>FSM</sub>	150		А				
Operating and Storage Junction Temperature Range	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150						

#### **ELECTRIAL CHARACTERISTICS**

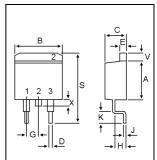
Characteristic	Symbol	S16S						l lm!s
		30	35	40	45	50	60	Unit
Maximum Instantaneous Forward Voltage ( $I_F = 8 \text{ Amp } T_C = 25$ ) ( $I_F = 8 \text{ Amp } T_C = 100$ )	V <sub>F</sub>	0.55 0.48		0.70 0.60		V		
Typical Thermal Resistance junction to case	R <sub>θ j-c</sub>	3.8				/w		
Maximum Instantaneous Reverse Current ( Rated DC Voltage, $T_C = 25$ ) ( Rated DC Voltage, $T_C = 125$ )	I <sub>R</sub>	0.5 20				mA		

# SCHOTTKY BARRIER RECTIFIERS

16 AMPERES 30-60 VOLTS



TO-263 (D2-PAK)



DIM	MILLIMETERS					
J	MIN	MAX				
	IVIIIN	IVIAA				
Α	8.12	8.92				
В	9.90	10.30				
С	4.23	4.83				
D	0.51	0.89				
E	1.27	1.53				
G	2.54	BSC				
Н	2.03	2.79				
J	0.31	0.51				
K	2.29	2.79				
S	14.60	15.88				
V	1.57	1.83				
Х		1.40				

