

## SCHOTTKY DIODES STUD TYPE 60 A

### Features

High Surge Capability  
Types up to 45V  $V_{RRM}$

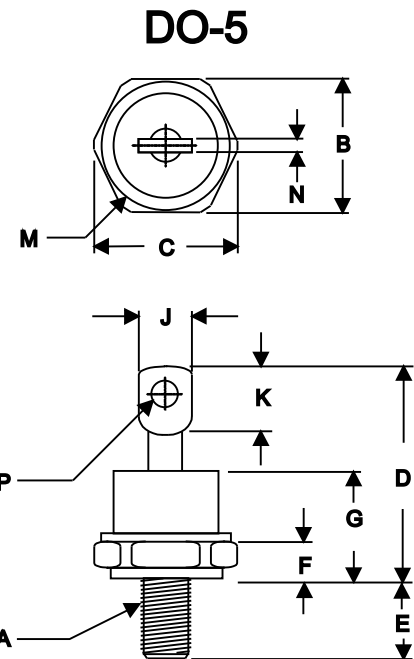
**60Amp Rectifier**  
**45 Volts**

### Maximum Ratings

Operating Temperature: -65 °C to +150 °C

Storage Temperature: -65 °C to +175 °C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SD51( R )	45V	32V	45V



Notes:

1. Standard Polarity: Stud is Cathode
2. Reverse Polarity: Stud is Anode

### Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	60A	$T_C = 100\text{ }^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	800A	8.3ms , half sine
Maximum Instantaneous Forward Voltage <small>NOTE (1)</small>	$V_F$	0.66V	$I_{FM} = 60\text{ A}$ $T_J = 25\text{ }^\circ\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage <small>NOTE (1)</small>	$I_R$	5.0 mA 200 mA	$T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$
Maximum Thermal Resistance, Junction To Case	$R_{\theta jc}$	1.0°C/W	

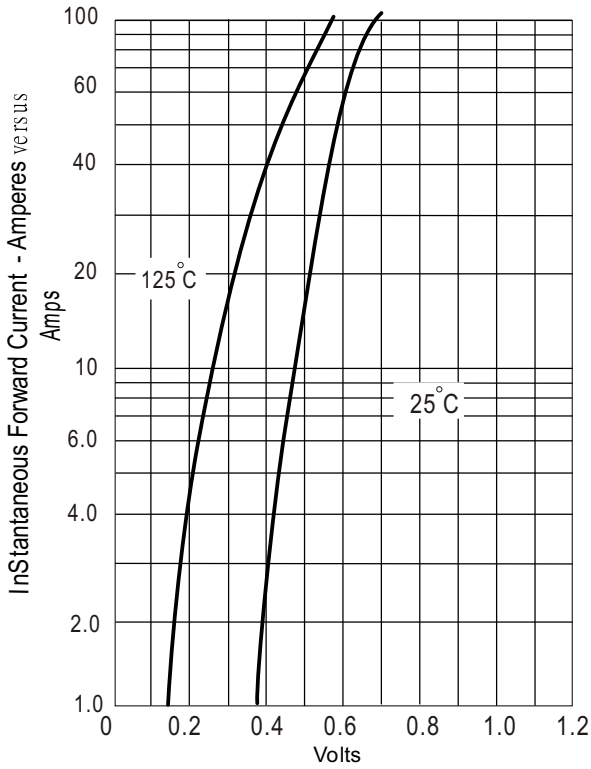
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	1/4 -28 Threads		Standard	Polarity	
B	.669	.687	17.19	17.44	
C	----	.794	----	20.16	
D	----	1.020	----	25.91	
E	.422	.453	10.72	11.50	
F	.115	.200	2.93	5.08	
G	----	.460	----	11.68	
H	----	----	----	----	
J	----	.375	----	9.52	
K	.156	----	3.96	----	
M	----	.667	----	16.94	
N	----	.080	----	2.03	
P	.140	.175	3.56	4.45	

NOTE :

- (1) Pulse Test: Pulse Width 300 usec, Duty Cycle < 2%

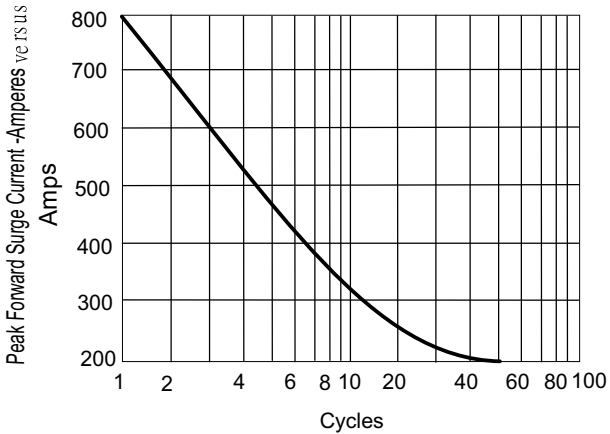
# SD51( R )

Figure 1  
Typical Forward Characteristics



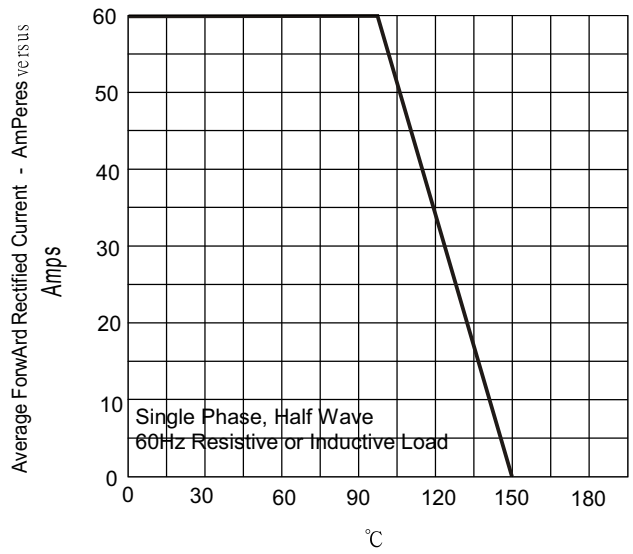
Instantaneous Forward Voltage - Volts

Figure 3  
Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles

Figure 2  
Forward Derating Curve



Case Temperature - °C

Figure 4  
Typical Reverse Characteristics

Figure 4  
Typical Reverse Characteristics

