



SCHOTTKY DIODES STUD TYPE 60 A

Features

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

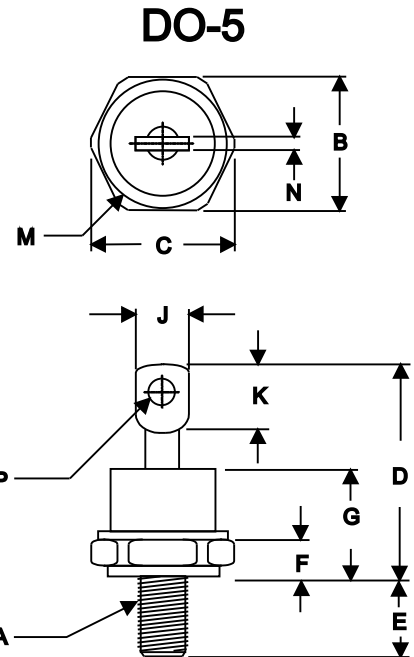
60Amp Rectifier
45 Volts

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 NOTE (1)	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 NOTE (1)	I_R	5.0mA 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	

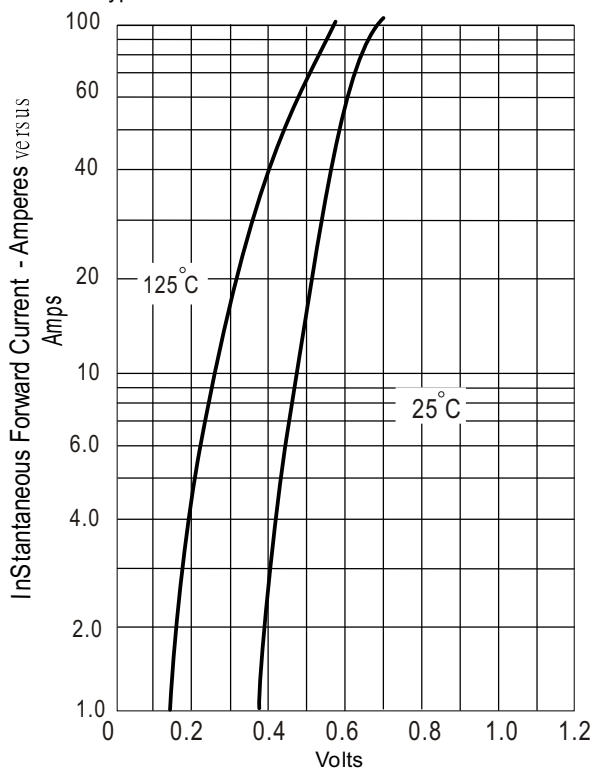
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1/4 -28 Threads		Standard	Polarity	
B	.669	.687	17.19	17.44	
C	----	.794	----	20.16	
D	----	1.020	----	25.91	
E	.422	.453	10.72	11.50	
F	.115	.200	2.93	5.08	
G	----	.460	----	11.68	
H	----	----	----	----	
J	----	.375	----	9.52	
K	.156	----	3.96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

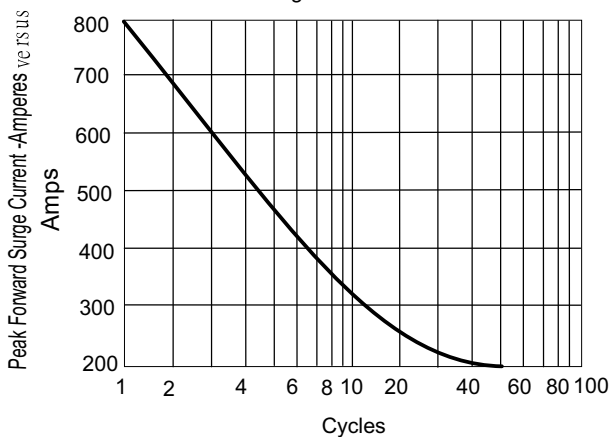
SD51(R)

Figure 1
Typical Forward Characteristics



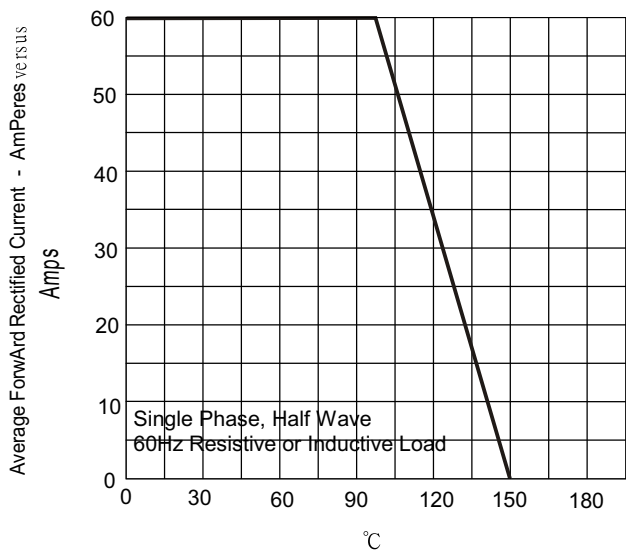
Instantaneous Forward Voltage - Volts

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

