

SCHOTTKY DIODES STUD TYPE 75A

Features

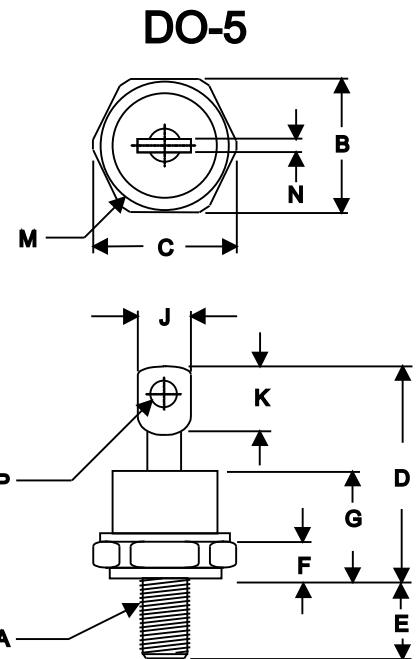
High Surge Capability
Types up to 100V_{V_RRM}

75Amp Rectifier
20-100 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
MBR7520(R)	20V	14V	20V
MBR7530(R)	30V	21V	30V
MBR7535(R)	35V	25V	35V
MBR7540(R)	40V	28V	40V
MBR7545(R)	45V	32V	45V
MBR7560(R)	60V	42V	60V
MBR7580(R)	80V	50V	80V
MBR75100(R)	100V	70V	100V



Notes:

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

Electrical Characteristics @ 25 °C Unless Otherwise Specified

Parameter	Symbol	75A	$T_c = 100^\circ\text{C}$
Average Forward Current	$I_{F(AV)}$	75A	
Peak Forward Surge Current	I_{FSM}	1000A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	0.65V 0.75V 0.84V	(MBR7520~MBR7545) (MBR7560) (MBR7580~MBR75100) $I_{FM} = 75\text{ A}; T_J = 25^\circ\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage	I_R	5.0mA 150 mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Maximum Thermal Resistance, Junction To Case	$R_{\theta jc}$	1.0°C/W	
Mounting torque	Kgf-cm	23~34	Not lubricated threads

NOTE :

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

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	

MBR7520(R) THRU MBR75100(R)

Figure .1- Typical Forward Characteristics

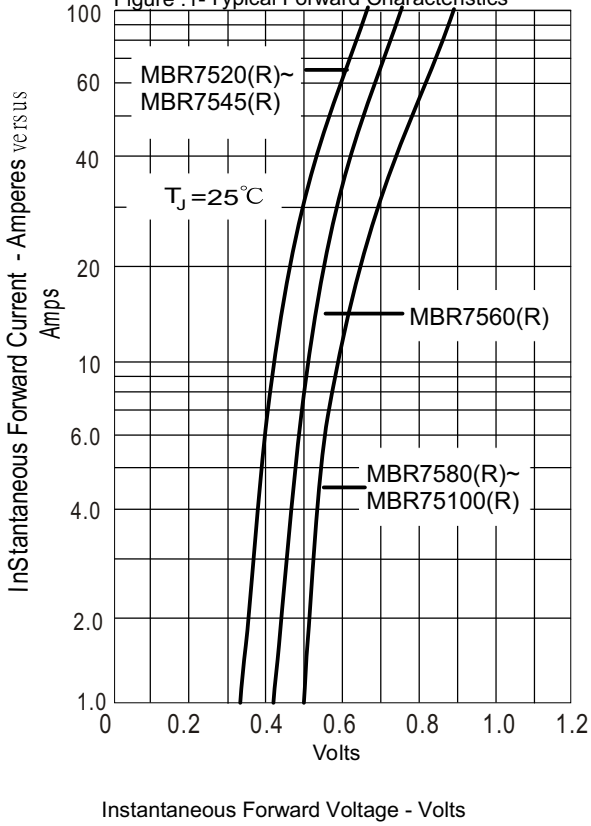


Figure .2- Forward Derating Curve

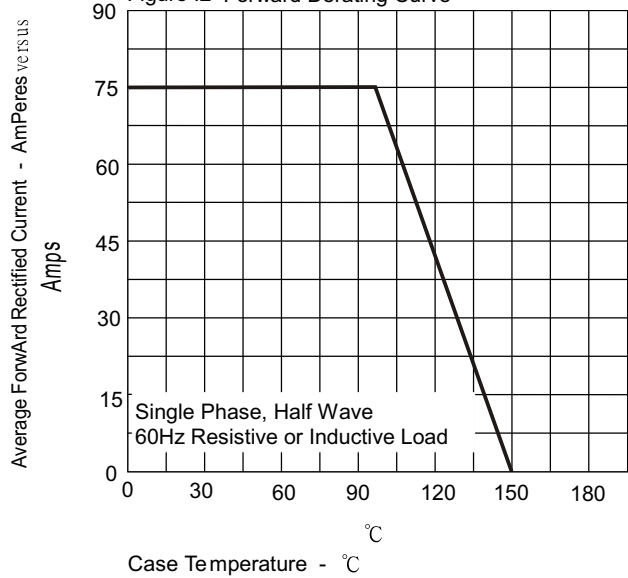


Figure .3- Peak Forward Surge Current

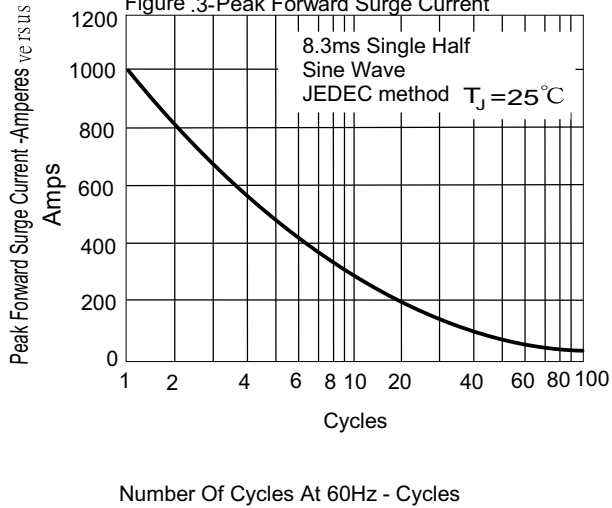


Figure .4- Typical Reverse Characteristics

