

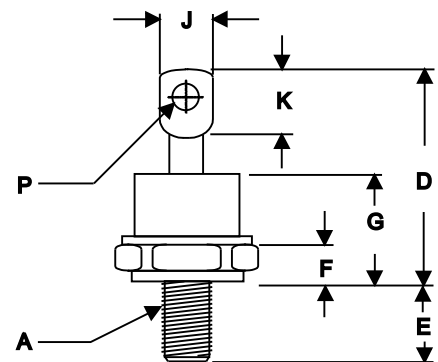
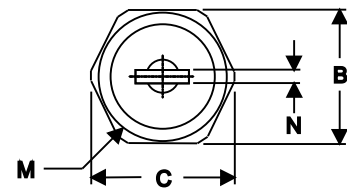
## SCHOTTKY DIODES STUD TYPE 60 A

### Features

- High Surge Capability
- Types up to 100V  $V_{RRM}$

60Amp Rectifier  
20-100 Volts

### DO-5



**Notes:**

- Standard Polarity: Stud is Cathode
- Reverse Polarity: Stud is Anode

### 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
MBR6020(R)	20V	14V	20V
MBR6030(R)	30V	21V	30V
MBR6035(R)	35V	25V	35V
MBR6040(R)	40V	28V	40V
MBR6045(R)	45V	32V	45V
MBR6060(R)	60V	42V	60V
MBR6080(R)	80V	50V	80V
MBR60100(R)	100V	70V	100V

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

Average Forward Current	$I_{F(AV)}$	60A	$T_c = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	700A	8.3ms, half sine
Maximum Instantaneous Forward Voltage <small>NOTE (1)</small>	$V_F$	0.65V 0.75V 0.84V	(MBR6020~MBR6045) (MBR6060) (MBR6080~MBR60100) $I_{FM} = 60\text{ A}; T_J = 25^\circ\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage <small>NOTE (1)</small>	$I_R$	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

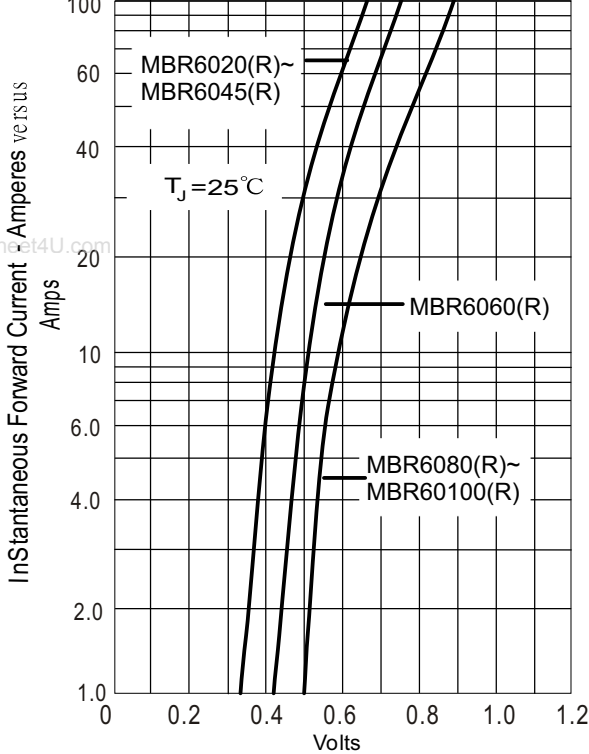
NOTE :

- (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	

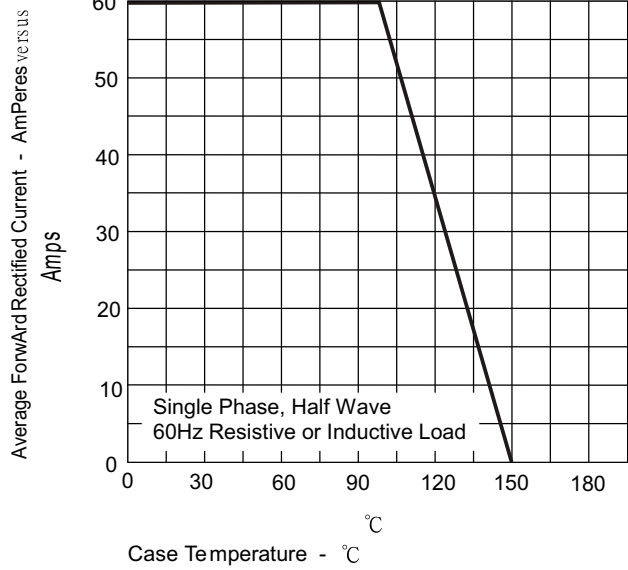
# MBR6020(R) THRU MBR60100(R)

Figure .1-Typical Forward Characteristics



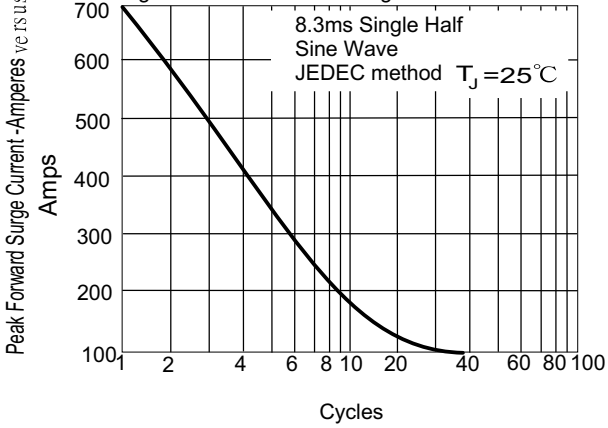
Instantaneous Forward Voltage - Volts

Figure .2- Forward Derating Curve



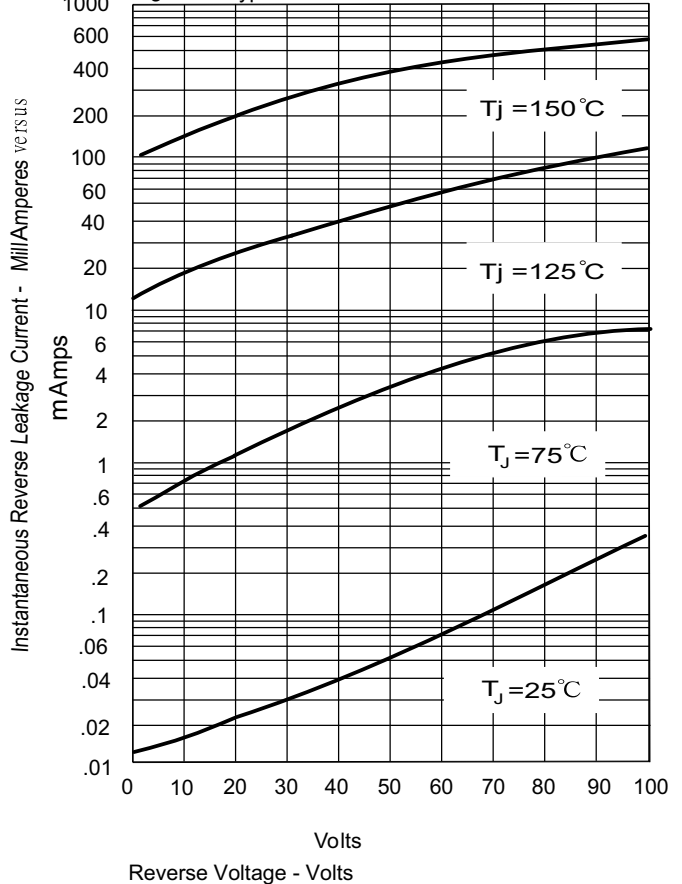
Case Temperature -  $^\circ\text{C}$

Figure .3-Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles

Figure .4-Typical Reverse Characteristics



Reverse Voltage - Volts