



DACO SEMICONDUCTOR CO., LTD.

MBRF30020(R)  
THRU  
MBRF300100(R)

SCHOTTKY DIODES MODULE TYPE 300A

Features

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

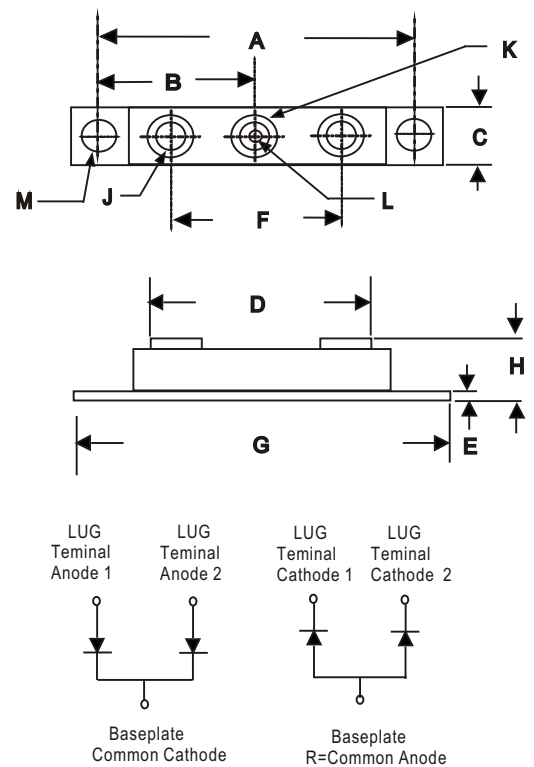
300Amp Rectifier  
20-100 Volts

FULL PACKAGE

Maximum Ratings

Operating Temperature: -40 °C to +175 °C  
Storage Temperature: -40 °C to +175 °C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRF30020(R)	20V	14V	20V
MBRF30030(R)	30V	21V	30V
MBRF30035(R)	35V	25V	35V
MBRF30040(R)	40V	28V	40V
MBRF30045(R)	45V	32V	45V
MBRF30060(R)	60V	42V	60V
MBRF30080(R)	80V	56V	80V
MBRF300100(R)	100V	70V	100V



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	300A	$T_C = 140^\circ C$
Peak Forward Surge Current (Per leg)	$I_{FSM}$	2500A	8.3ms, half sine
Maximum Instantaneous Forward Voltage (Per leg) NOTE (1)	$V_F$	0.65V 0.75V 0.84V	(MBRF30020~MBRF30045) (MBRF30060) (MBRF30080~MBRF300100) $I_{FM} = 150A; T_j = 25^\circ C$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1)	$I_R$	8.0 mA 200 mA	$T_j = 25^\circ C$ $T_j = 125^\circ C$
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	0.8°C/W	

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	3.150	NOM	80.01	NOM	
B	1.565	1.585	39.75	40.26	
C	.700	.800	17.78	20.32	
E	.119	.132	3.02	3.35	
F	1.375	REF	34.92	REF	
G	3.55	3.65	90.17	92.71	
H	.604	.635	15.35	16.35	
J	1/4	- 20	UNC	FULL	
K	.380	.410	9.65	10.41	∅
L	.185	.195	4.70	4.95	∅
M	.275	.295	6.99	7.49	∅

NOTE :

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



Figure .1-Typical Forward Characteristics

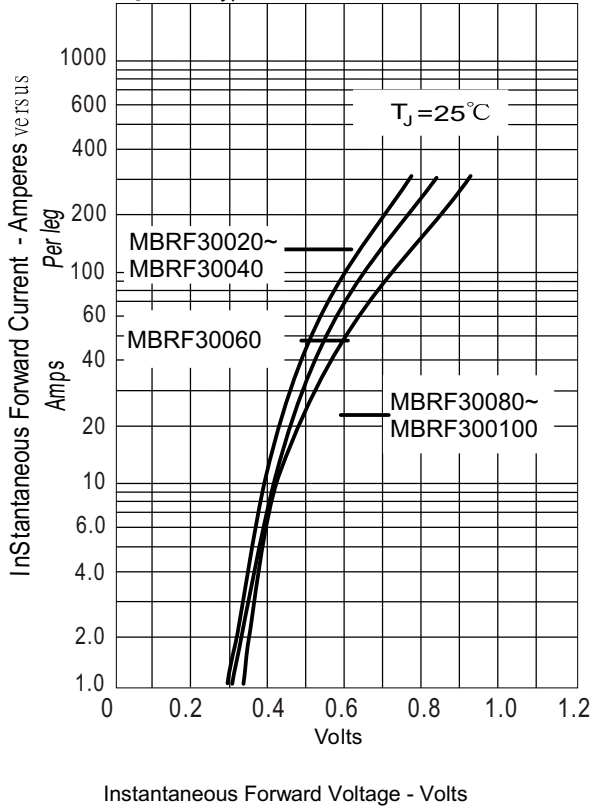


Figure .2-Forward Derating Curve

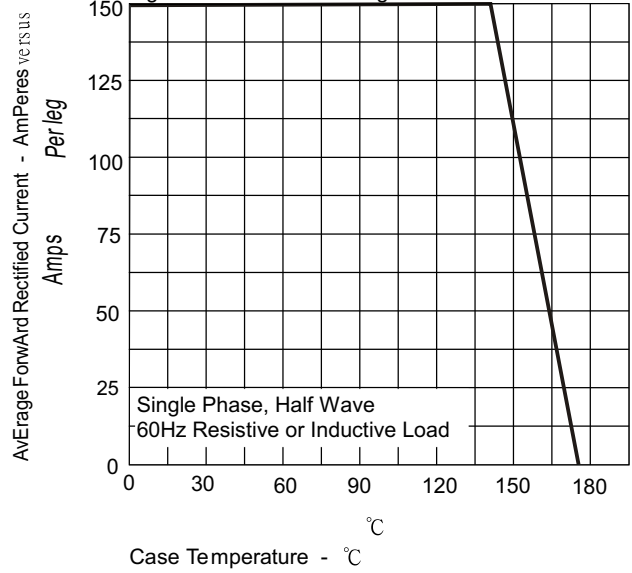


Figure .3-Peak Forward Surge Current

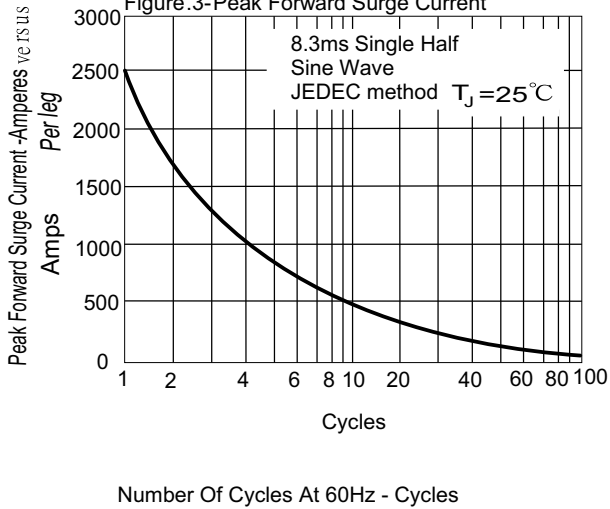


Figure .4-Typical Reverse Characteristics

