

**SUPERFAST DIODE MODULE TYPES 140A**
**Features**

High Surge Capability  
Types Up to 600V  $V_{RRM}$   
Non Isolated to Plate

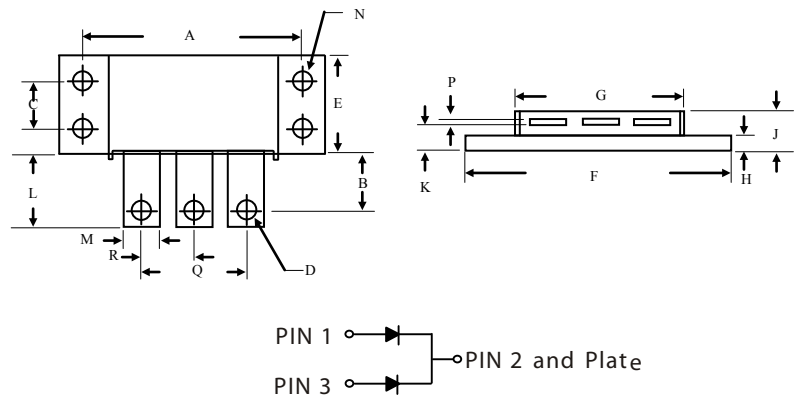
**140 Amp Rectifier  
50-600 Volts**

**Maximum Ratings**

Operating Temperature:  $-55^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$   
Storage Temperature:  $-55^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$

**Power Mod (TO-249AB)**

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
AMS005	50V	35V	50V
AMS010	100V	70V	100V
AMS020	200V	140V	200V
AMS040	400V	280V	400V
AMS060	600V	420V	600V


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

Average Forward Current (Per pkg)	$I_{F(AV)}$	140 A	$T_C = 125^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	$I_{FSM}$	1300A	8.3ms , half sine
Maximum Instantaneous Forward Voltage * 005~020 040 060	$V_F$	1.00V 1.30V 1.70V	$I_{FM} = 70A;$ $T_J = 25^{\circ}\text{C}$
Maximum Reverse Current At Rated DC Blocking Voltage (Per leg)	$I_R$	25 uA 3 mA	$T_J = 25^{\circ}\text{C}$ $T_J = 125^{\circ}\text{C}$
Maximum Reverse Recovery Time Per leg 005~020 040 060	$t_{rr}$	75 ns 85 ns 90 ns	$I_F = 0.5A, I_R = 1.0A,$ $I_{RR} = 0.25A$
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	0.60 °C/W	

DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	1.995	2.005	50.67	50.93
B	0.300	0.325	7.62	8.26
C	0.495	0.505	12.57	12.83
D	0.182	0.192	4.62	4.88
E	0.990	1.010	25.15	26.65
F	2.390	2.410	60.71	61.21
G	1.495	1.525	37.90	38.70
H	0.114	0.122	2.90	3.10
J	-----	0.420	-----	10.67
K	0.256	0.275	6.5	7.0
L	0.490	0.510	12.45	12.95
M	0.330	0.350	8.38	8.90
N	0.175	0.195	4.45	4.95
P	0.035	0.045	0.89	1.14
R	0.445	0.455	11.30	11.56
Q	0.890	0.910	22.61	23.11

\*Pulse Test:Pulse Width 300  $\mu\text{sec}$ , Duty Cycle 2%