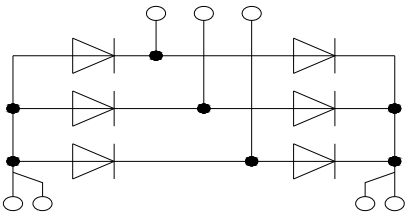
Three Phase Rectifier Bridge Module

Econo PIM 2



Description:

1) Low forward voltage and leakage current
2) Low inductance package
3) High surge current capability

Typical Application:

1) Field supply for DC motors
2) Line rectifiers for transistorized AC motor controllers
3) Non-controllable rectifiers for AC/DC converter

Absolute Maximum Ratings (Packaged into Econo PIM 2, unless otherwise specified, T_{CASE}=25℃)

Parameter	Test Conditions	Symbol	Values	Unit
Junction temperature range		T_J	-40~+150	℃
Storage temperature range		T_{STG}	-40~+125	℃
Repetitive peak reverse voltage		V_{RRM}	2200	V
Non-repetitive peak reverse voltage		V_{RSM}	2300	V
Output current	T_C=95℃	I_D	240	A
Forward surge current	1/2 cycle, Sine wave 50Hz, T_J=25℃	I_{FSM}	2200	A
Value for fusing		I^2t	24200	A^2s
RMS isolation voltage	A.C 50Hz(1s/1min)	V_{isol}	4300/3600	V

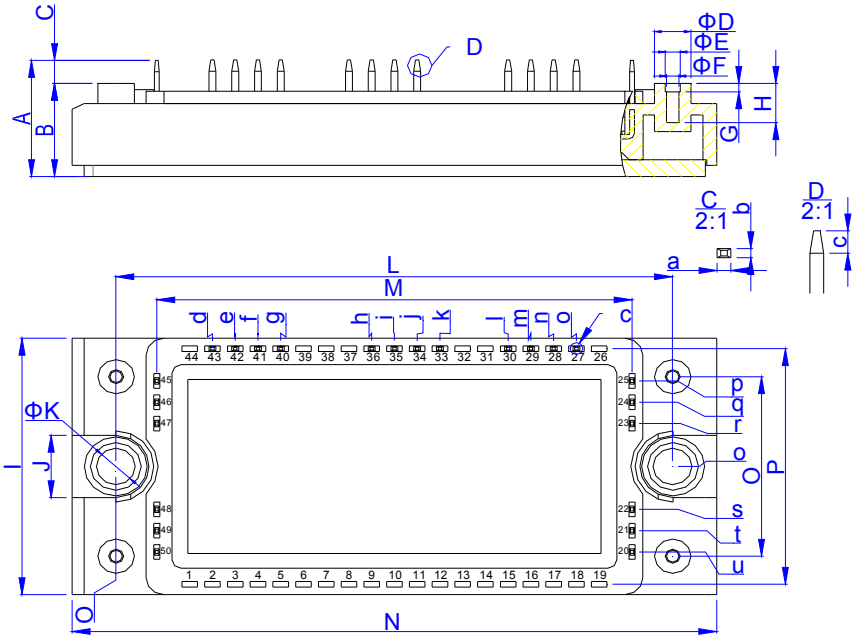
Electrical Characteristics (Packaged into Econo PIM 2, unless otherwise specified, T_{CASE}=25℃)

Parameter	Test Conditions	Symbol	Values			Unit
			Min.	Typ.	Max.	
Forward voltage	I_F=240A,T_J=25℃	V_{FM}	-	-	1.6	V
Reverse leakage current	V_R=V_{RRM},T_J=25℃	I_{RRM}	-	-	0.1	mA
	V_R=V_{RRM},T_J=150℃		-	-	30	mA
Threshold voltage	T_J=150℃, for power loss calculation only	V_{TO}	-	-	0.85	V
Slope resistance		r_T	-	-	2.0	mΩ

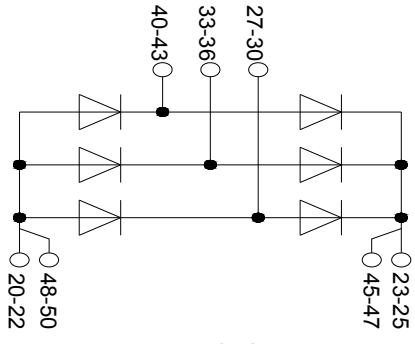
Thermal Characteristics (Packaged into Econo PIM 2, unless otherwise specified, T_{CASE}=25℃)

Parameter	Test Conditions	Symbol	Values			Unit
			Min.	Typ.	Max.	
Thermal impedance (junction to case)	Per diode	$R_{th(j-c)}$	-	-	0.35	℃/W
Mounting torque	Module torque	M	3	-	6	Nm
Weight			185			g
Case style			Econo PIM 2			

Mechanical Characteristics(mm)



Ref	Dimensions					
	Millimeters			Inches		
	Min	Typ	Max	Min	Typ	Max
A	20.5	21	21.5	0.807	0.827	0.846
B	16.3	16.8	17.3	0.642	0.661	0.681
C	3.8	4.3	4.8	0.150	0.169	0.189
D		6			0.236	
E	2.2	2.5	2.8	0.087	0.098	0.110
F	1.8	2.1	2.4	0.071	0.083	0.094
G	1.2	1.5	1.8	0.047	0.059	0.071
H		6			0.236	
I	44.5	45	45.5	1.752	1.772	1.791
J		11			0.433	
K	5	5.5	6	0.197	0.217	0.236
L	92.7	93	93.3	3.650	3.661	3.673
M		79.2			3.118	
N	107	107.5	108	4.213	4.232	4.252
O	31.7	32	32.3	1.248	1.260	1.272
P		41.9			1.650	
a	1.1	1.2	1.3	0.043	0.047	0.051
b	0.6	0.8	1	0.024	0.031	0.039
c	1.1	1.7	2.3	0.043	0.067	0.091
d		16.02			0.631	
e		19.83			0.781	
f		23.64			0.931	
g		27.45			1.081	
h		42.69			1.681	
i		46.5			1.831	
j		50.31			1.981	
k		54.12			2.131	
l		65.55			2.581	
m		69.36			2.731	
n		73.17			2.881	
o		76.98			3.031	
p		15.24			0.600	
q		11.43			0.450	
r		7.62			0.300	
s		7.62			0.300	
t		11.43			0.450	
u		15.24			0.600	



symbol