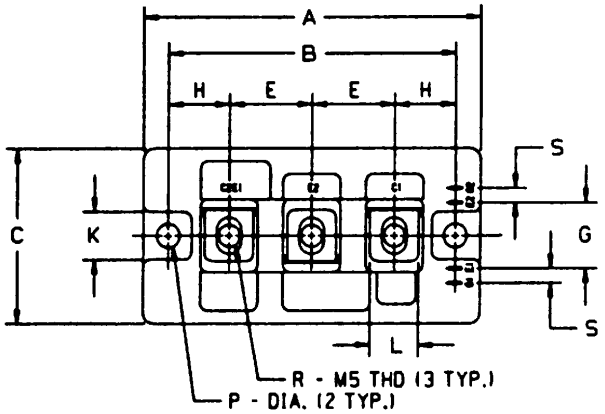
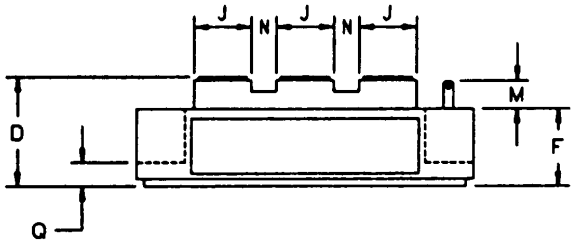
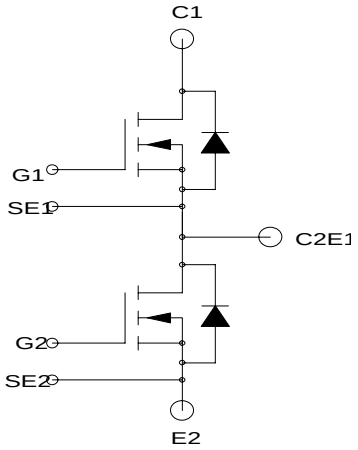
Powerex Inc., 200 Hillis St., Youngwood 15697 (724) 925-7272

Dual Power MOSFET Module
100 Volts 420 Amperes







Description:
Powerex Dual Mosfet Module designed specially for customer applications.

Features:
- **Isolated Mounting**
- **Copper Baseplate**
- **Low Drive Requirement**
- **Internal Series Gate Resistors (6Ω per chip)**
- **Low Rds(on)**
- **Fast Diodes**
- **(6) FS70UMJ-2 Chips per Mosfet Switch**

Dim	Inches	Millimeters
A	3.70	94.0
B	3.150 ±0.01	80.0 ±0.25
C	1.89	48.0
D	1.18 Max.	30.0 Max
E	0.90	23.0
F	.83	21.2
G	0.71	18.0
H	0.67	17.0
J	0.63	16.0
K	0.51	13.0
L	0.47	12.0
M	0.30	7.5
N	0.28	7.0
P	0.256 Dia.	Dia. 6.5
Q	0.26	6.5
R	---	M5
S	0.16	4.0

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Electrical Characteristics (Tc = 25°C)

Symbol	Parameter	Min.	Typ.	Max.	Units
$V_{(BR)DSS}$	Drain Source Breakdown Voltage I_D=6mA, V_{GS}=0	100	--	--	V
V_{GSS}	Gate Source Voltage V_{DS}=0	--	--	± 20	V
I_{GSS}	Gate Leakage Current V_{GS}=±20V, V_{DS}=0	--	--	± 0.6	µA
I_{DSS}	Drain Leakage Current V_{DS}=100V, V_{GS}=0	--	--	0.6	mA
$V_{GS(th)}$	Gate Source Threshold Voltage I_D=6mA, V_{DS}=10V	1.0	1.5	2.0	V
$R_{DS(ON)}$	Drain Source On State Resistance I_D=210A, V_{GS}=10V	--	2.2	2.8	mΩ
$V_{DS(ON)}$	Drain Source On-State Voltage I_D=210A, V_{GS}=10V	--	0.46	0.6	V
C_{iss}	Input Capacitance V_{DS}=10V, V_{GS}=0, f =1MHz	--	49200	--	pF
C_{oss}	Output Capacitance V_{DS}=10V, V_{GS}=0, f =1MHz	--	6900	--	pF
C_{rss}	Reverse Transfer Capacitance V_{DS}=10V, V_{GS}=0, f =1MHz	--	3600	--	pF
V_{SD}	Source Drain Voltage I_S=210A, V_{GS}=0V	--	1.0	1.5	V
$R_{th(j-c)}$	Thermal Impedance Junction to Case (Per MOSFET)	--	0.13	0.16	°C/W
T_J	Junction Temperature	-40	--	125	°C
PACKAGE					
Vrms	V Isolation	--	--	2000	VAC
	Module weight	--	270	--	g
	Mounting torque M5 Terminal Screw	--	--	4	Nm
	Terminal torque, M6 Mounting Screw	--	--	6	Nm
$R_{th(c-s)}$	Thermal Impedance Case to Sink	--	--	0.035	°C/W