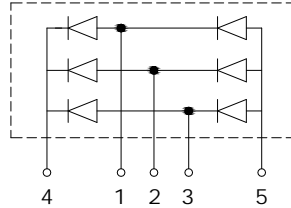


## PRELIMINARY DATASHEET

### 1600V Rectifier Diodes in 3-Phase Bridge Configuration In iQPak™1 Power Module Package

- General purpose rectifiers
- Low forward voltage
- Pb-free finished; RoHS compliant



### MAXIMUM RATINGS (per Diode) , at $T_c = 25^\circ\text{C}$ , unless otherwise specified

Parameter	Symbol	Value	Units
Repetitive peak reverse voltage	$V_{RRM}$	1600	V
Continuous forward current $T_c = 100^\circ\text{C}$	$I_F$	100	A
Surge non-repetitive forward current $T_j = 45^\circ\text{C}; t_p = 10 \text{ ms, (50Hz), sine}$ $T_j = T_{jmax}; t_p = 10 \text{ ms, (50Hz), sine}$	$I_{FSM}$	1000 800	
Operating junction and storage temperature	$T_j, T_{stg}$	-40... +150	

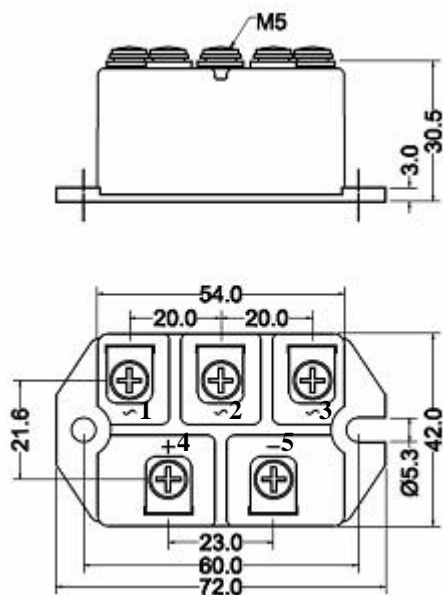
### Thermal and Isolation Characteristics

Parameter	Symbol	Max. Value	Units
<b>Characteristics</b>			
Diode thermal resistance, junction to case	$R_{thJCD}$	0.9	K/W
Module thermal resistance, junction to case	$R_{thJCM}$	0.15	K/W
Isolation voltage, RMS (measured between terminals and mounting base, 50-60 Hz, for 1-3 seconds )	$V_{iso}$	3000	V

### Electrical Characteristics (per Diode), at $T_c = 25^\circ\text{C}$ , unless otherwise specified

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
Static Characteristics					
Reverse leakage current V <sub>R</sub> = 1600V	I <sub>R</sub>	-	-	500	μA
Forward voltage drop I <sub>F</sub> = 200A, T <sub>j</sub> = 125°C	V <sub>F</sub>	-	1.4	-	V

## Package Outline Drawing



## Disclaimer

These specifications may not be considered as a guarantee of components characteristics. Components have to be tested depending on intended application as adjustments may be necessary. The use of **iQXPRZ Power Inc.** components in life support appliances and systems are subject to written approval of **iQXPRZ Power Inc.**