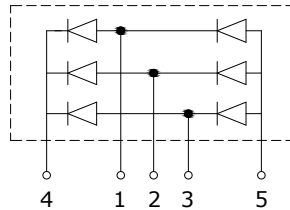


**PRELIMINARY DATASHEET**
**1600V Rectifier Diodes in 3-Phase Bridge Configuration  
 In iQPak™1 Power Module Package**

- General purpose rectifiers
- Low forward voltage
- Pb-free lead finish; 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 $t_p = 10 \text{ ms}$ , no voltage reapplied, sine wave, $T_j = 45^\circ\text{C}$	$I_{FSM}$	1000	
Soldering temperature Wave soldering, 1.6 mm (0.063 in.) from case for 10s	$T_S$	260	$^\circ\text{C}$
Operating junction and storage temperature	$T_j, T_{stg}$	-40... +150	

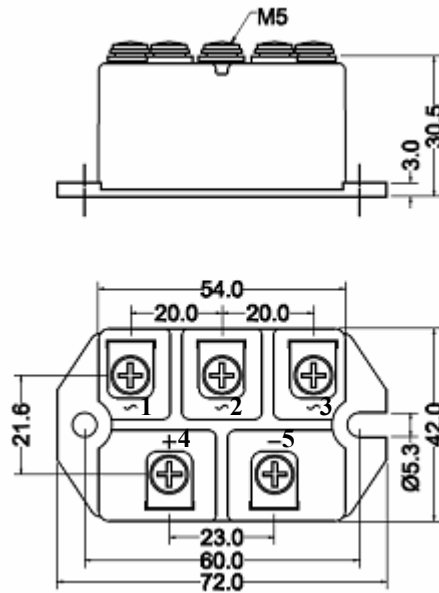
**Thermal and Isolation Characteristics**

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.	
<b>Static Characteristics</b>					
Reverse leakage current At 100% $V_{rrm}$	$I_R$	-	-	500	$\mu\text{A}$
Forward voltage drop $I_F = 200\text{A}$ , $T_j = 125^\circ\text{C}$	$V_F$	-	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.**