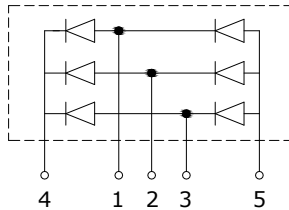


PRELIMINARY DATASHEET
**1600V Rectifier Diodes in 3-Phase Bridge Configuration
 In iQPak™1 Power Module Package**

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


MAXIMUM RATINGS, at $T_j = 25^\circ\text{C}$, 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	80	A
Maximum RMS forward current	$I_{F(RMS)}$	126	
Surge non-repetitive forward current $T_c = 25^\circ\text{C}$, $t_p = 10$ ms, sine halfwave	I_{FSM}	1500	
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	

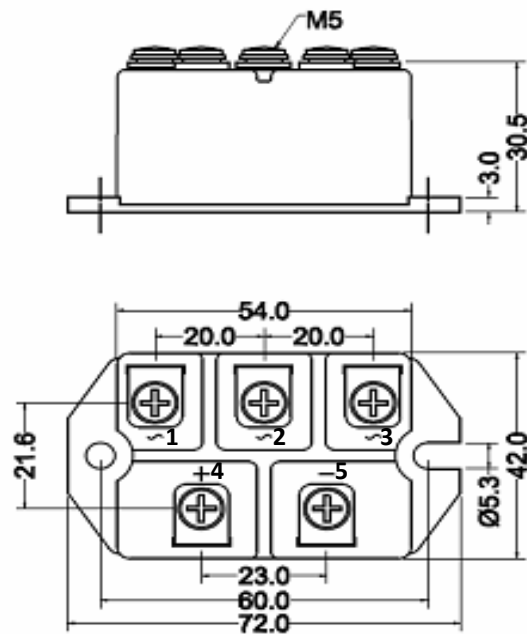
Thermal and Isolation Characteristics

Parameter	Symbol	Max. Value	Units
Characteristics			
Thermal resistance, junction to case	R_{thJC}	0.28	$^\circ\text{C}/\text{W}$
Isolation voltage, RMS (measured between terminals and mounting base, 50-60 Hz, for 1-3 seconds)	V_{iso}	3000	V

Electrical Characteristics, at $T_j = 25^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
Static Characteristics					
Reverse leakage current $V_R = 1600\text{V}$	I_R	-	-	10	mA
Forward voltage drop $I_{FM} = 250\text{A}$	V_{FM}	-	1.6	-	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.**