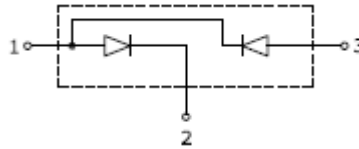


PRELIMINARY DATASHEET
**Rectifier Diodes, 2 x 100A, 1600V, Half-Bridge Configuration
 In iQPak™ Power Module Package**

- High voltage
- High surge capability
- Low thermal resistance
- Industrial standard package


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

Parameter	Symbol	Value	Units
Repetitive peak reverse voltage	V_{RRM}	1600	V
Average forward current $T_C = 100^\circ\text{C}$	$I_{F(AV)}$	100	A
Maximum RMS forward current	$I_{F(RMS)}$	157	
Surge non-repetitive forward current $t_p = 10\text{ ms}$, no voltage reapplied, half sine wave	I_{FSM}	2020	
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	

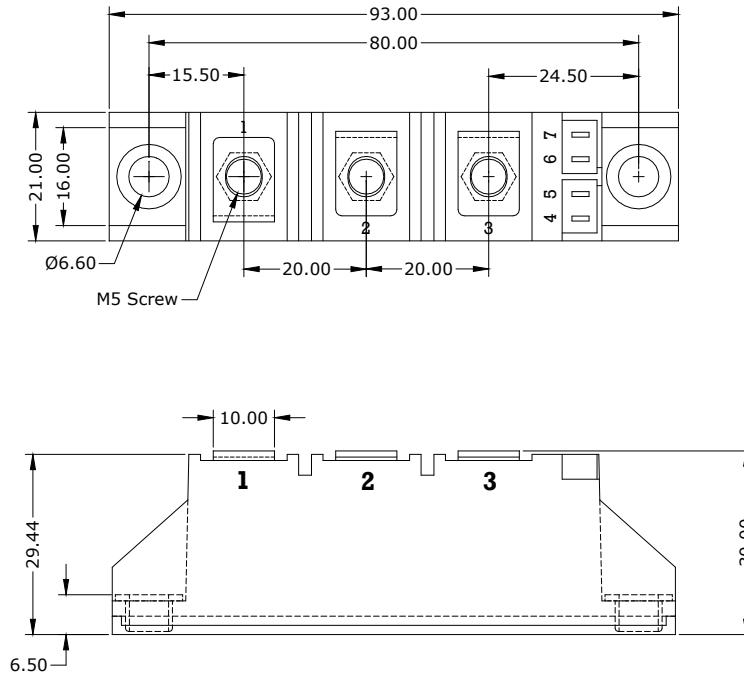
Thermal and Isolation Characteristics

Parameter	Symbol	Max. Value	Units
Characteristics			
Thermal resistance, junction to case, per Diode	R_{thJC}	0.22	$^\circ\text{C}/\text{W}$
Isolation voltage, RMS (measured between terminals and mounting base, 50-60 Hz, for 1-3 seconds)	V_{iso}	3000	V

Electrical Characteristics (per Diode), 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 $I_F = 100\text{A}$	V_F	-	1.55	-	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.**