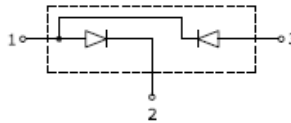


**PRELIMINARY DATASHEET**
**Rectifier Diodes, 2x70A 1600V, Half-Bridge Configuration  
 In iQPak™ Power Module Package**

- 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
Maximum average forward current 180° conduction, half sine wave, $T_C = 100^\circ\text{C}$	$I_{F(AV)}$	70	A
Maximum RMS forward current	$I_{F(RMS)}$	110	
Maximum peak, forward, non-repetitive surge current $t = 10\text{ms}$ , no voltage reapplied, sinusoidal half wave	$I_{FSM}$	1300	
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	

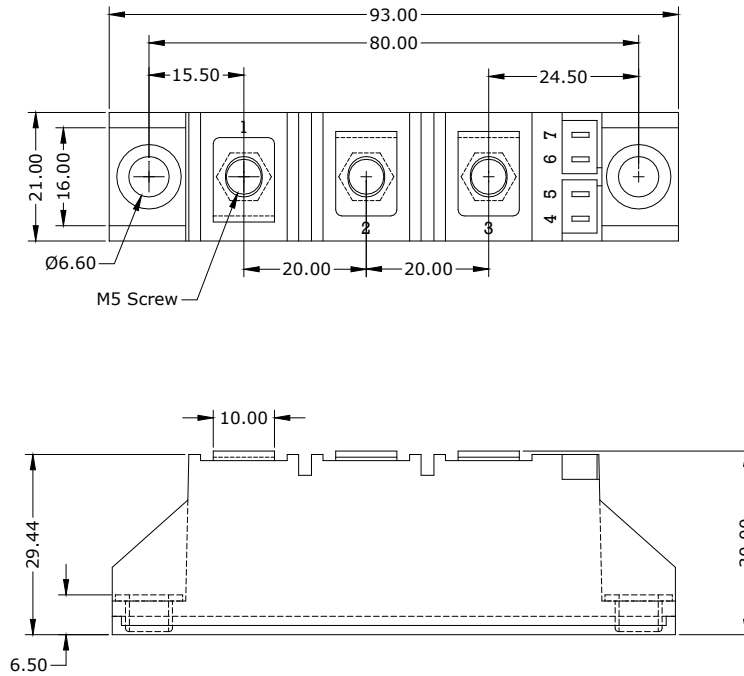
**Thermal and Isolation Characteristics**

Parameter	Symbol	Max. Value	Units
<b>Characteristics</b>			
Thermal resistance, junction to case, per Diode	$R_{thJC}$	0.33	$^\circ\text{C}/\text{W}$
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.	
<b>Static Characteristics</b>					
Reverse leakage current $V_R = 1600\text{V}$	$I_R$	-	-	10	$\mu\text{A}$
Forward voltage drop $I_F = 70\text{A}$	$V_F$	-	1.1	-	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.**