

PRELIMINARY DATASHEETS
**85A, 1600V Rectifier Diodes,
in SOT227 Package**

- Low forward voltage
- High surge capability
- 150 °C maximum junction temperature
- 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
Maximum average forward current $T_c = 104^\circ\text{C}$	I_F	85	A
Surge non-repetitive forward current $t_p = 10\text{ ms}$, sine halfwave, no voltage reapplied	I_{FSM}	1500	
Operating junction and storage temperature	T_j, T_{stg}	-40... +150	$^\circ\text{C}$

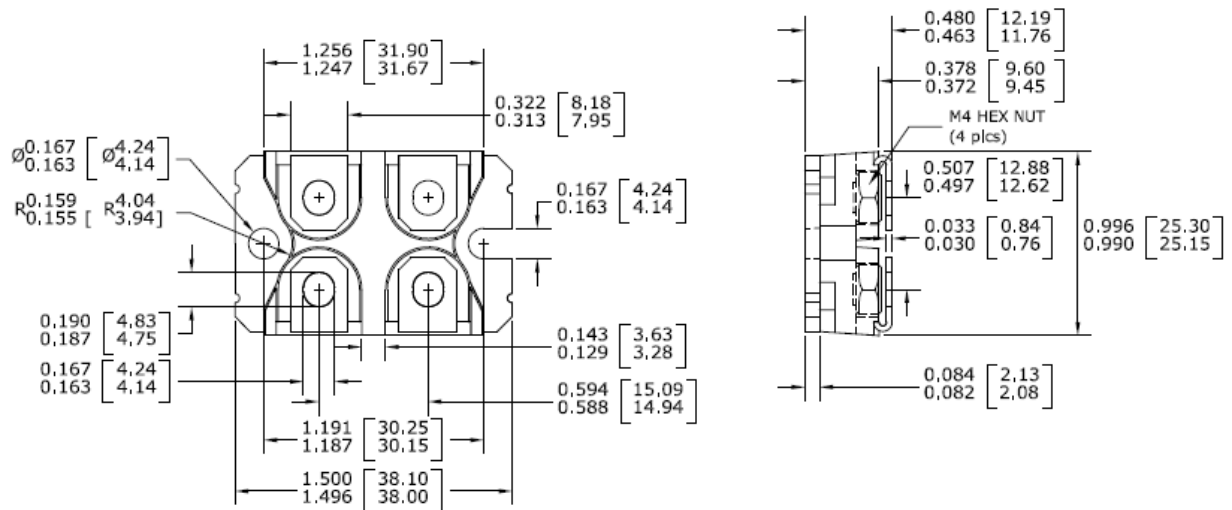
Thermal and Isolation Characteristics

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 $V_R = 1600\text{V}$, $T_j = 150^\circ\text{C}$	I_R	-	-	10	mA
Forward voltage drop $I_F = 85\text{A}$	V_F	-	1.14	-	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.**