

PRELIMINARY DATASHEET

Rectifier Diodes 110A, 1200V In Isolated SOT227 Package

- High surge capability
- Large creepage distances
- Designed for industrial level
- Pb-free lead finish; RoHS compliant



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

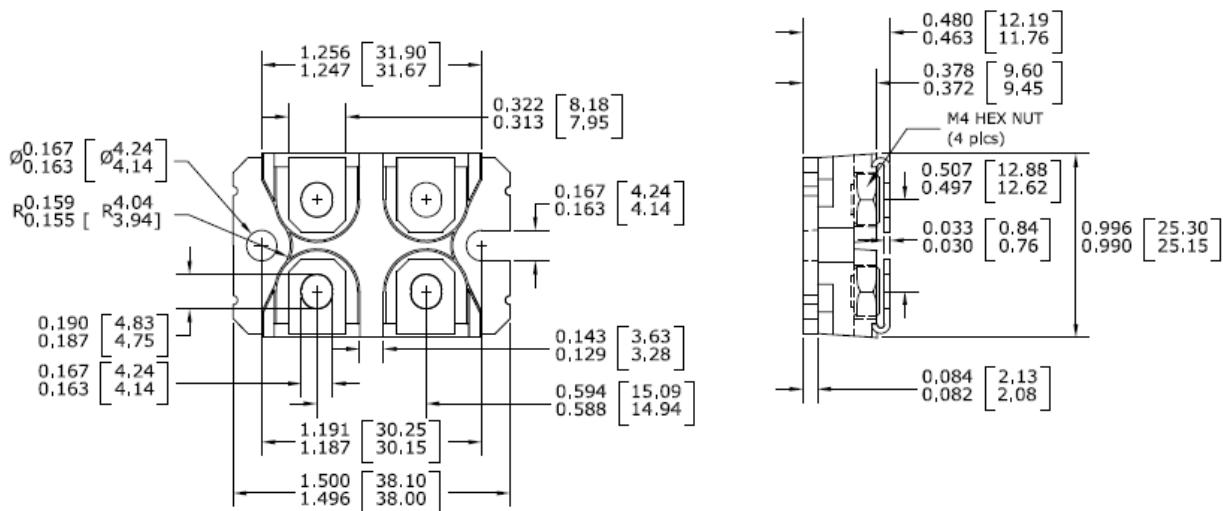
Parameter	Symbol	Value	Units
Repetitive peak reverse voltage	V_{RRM}	1600	V
Maximum average forward current 180° conduction, half sine wave, $T_C = 85^\circ\text{C}$	$I_{F(AV)}$	110	A
Maximum RMS forward current	$I_{F(RMS)}$	173	
Maximum peak, forward, non-repetitive surge current $t=10\text{ms}$, no voltage reapplied, sinusoidal half wave $t=10\text{ms}$, 100% V_{RRM} reapplied, sinusoidal half wave	I_{FSM}	2000 1700	$^\circ\text{C}$
Soldering temperature Wave soldering, 1.6 mm (0.063 in.) from case for 10s	T_s	260	
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}	0.47	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 $T_j = 25^\circ\text{C}$, 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 $I_F = 110\text{A}$	V_F	-	1.13	-	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.**