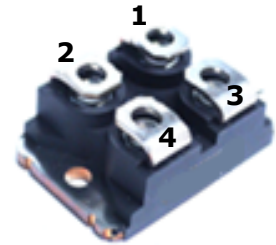
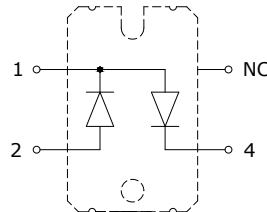


PRELIMINARY DATASHEET
50A, 1600V Rectifier Diodes in Half Bridge Configuration in Isolated SOT227 Package

- Low forward voltage
- High surge capability
- 150 °C maximum junction temperature
- 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
DC forward current $T_c = 70^\circ\text{C}$	I_F	50	A
Surge non-repetitive forward current 10 ms sine pulse, rated V_{RRM} applied $t_p = 10\text{ms}$, No voltage reapplied, Half wave sine	I_{FSM}	400 475	
Operating junction and storage temperature	T_j, T_{stg}	-40... +150	$^\circ\text{C}$

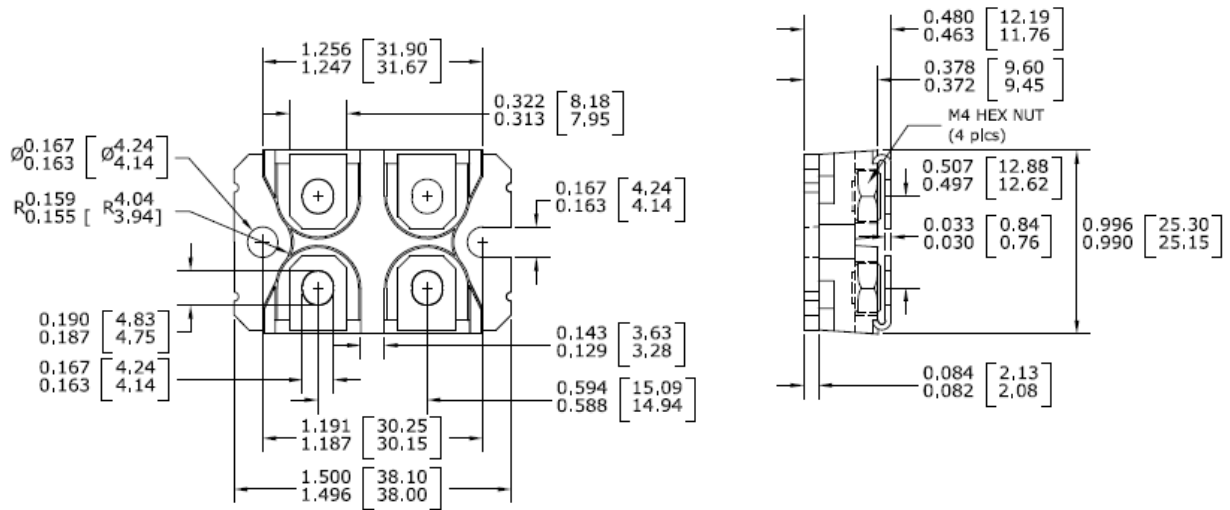
Thermal and Isolation Characteristics

Parameter	Symbol	Max. Value	Units
Characteristics			
Thermal resistance, junction to case	R_{thJC}	0.78	$^\circ\text{C}/\text{W}$
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	-	-	200	μA
Forward voltage drop $I_F = 50\text{A}$	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.**