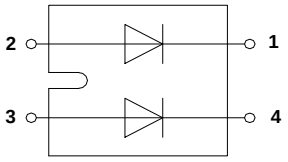
Rev.1.1 Oct.23 2024

JU101K2/06

SOT-227



Symbol

Description

1) Low forward voltage drop
2) Two fully independent diodes
3) Fully insulated package
4) Easy to use and parallel
5) Industry standard outline
6) Designed and qualified for industrial level

Typical Application

Optimized for power conversion: welding and industrial SMPS applications

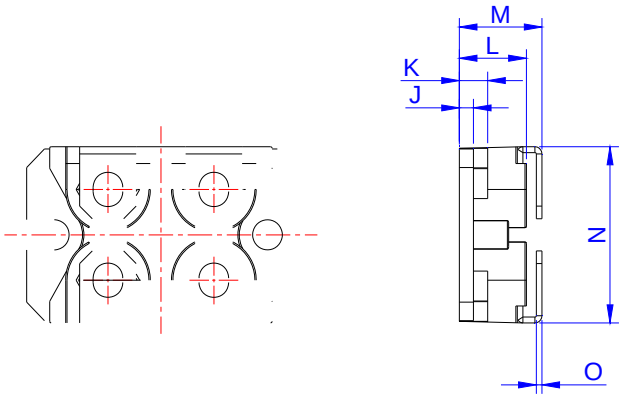
Absolute Maximum Ratings(Packaged into SOT-227, unless otherwise specified, T_{CASE}=25)

Parameter	Test Conditions	Symbol	Values	Unit
Junction temperature range		T_J	-40-150	
Storage temperature range		T_{STG}	-40-150	
Repetitive peak reverse voltage	T_J=25	V_{RRM}	600	V
Non-repetitive peak reverse voltage	T_J=25	V_{RSM}	600	V
Average forward current	T_C=50 , per diode	$I_{F(AV)}$	100	A
Peak on-state surge current	t_P=10ms,sin 180°,T_J=25	I_{FSM}	1000	A
I^2t value	t_P=10ms,sin 180°,T_J=25	I^2t	5000	A^2s
Isolation voltage	A.C 50Hz(1s/1min)	V_{ISO}	3000/2500	V

Electrical Characteristics(Packaged into SOT-227, unless otherwise specified, T_{CASE}=25)

Parameter	Test Conditions	Symbol	Values			Unit
			Min.	Typ.	Max.	
Forward voltage	I_F=100A ,T_J=25	V_F	-	1.45	1.80	V
Reverse leakage current	V_R=V_{RRM}, T_J=25	I_R	-	-	0.01	mA
	V_R=V_{RRM}, T_J=150		-	-	20	mA
Maximum reverse recovery time	I_F=100A,V_R=300V, -di/dt=200A/μs,Tj=25	t_{rr}	-	150	250	ns

Mechanical Characteristics



Technical requirements
1.Unmarked tolerances of dimension are performed in accordance with GB/T 1804-2000 Level C
2.Unmarked tolerances of form and position are performed in accordance with GB/T 1184-1996 Level L