

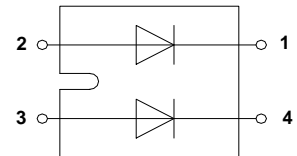
JU100K2/12

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



SOT-227



Symbol

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
Juncn	25 RSM 1200	V		

Average forward current	$T_C=50$, per diode	$I_{F(AV)}$	100	A
Peak on-state surge current	$t_P=10ms, \sin 180^\circ, T_J=25$	I_{FSM}	850	A
I^2t value	$t_P=10ms, \sin 180^\circ, T_J=25$	I^2t	3600	A^2s

Maximum reverse recovery current
 I_{RM}
 $I_F=50A, V_R=400V, -di/dt=200A/\mu s, T_J=25$ 2 A 36

	$I_F=1A, V_R=30V, -di/dt=100A/\mu s, T_J=25$	t_{rr}	45	ns
	$I_F=50A, V_R=400V, -di/dt=200A/\mu s, T_J=25$		220	
	$I_F=50A, V_R=400V, -di/dt=200A/\mu s, T_J=125$		370	
Maximum recovered charge	$I_F=50A, V_R=400V, -di/dt=200A/\mu s, T_J=25$	Q_{rr}	1500	nC
	$I_F=50A, V_R=400V, -di/dt=200A/\mu s, T_J=125$		5900	
Isolation voltage	A.C 50Hz(1s/1min)	V_{ISO}	3000/2500	V



Rectifier Diode Module

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	-	2.4	3.0	V
Reverse leakage current	$V_R=V_{RRM}, T_J=25$	I_R	-	-	0.02	mA
	$V_R=V_{RRM}, T_J=150$		-	-	1	mA

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

Parameter	Test Conditions	Symbol	Values			Unit
			Min.	Typ.	Max.	
Junction to case	Per diode	$R_{th(j-c)}$	-	-	0.55	/W
Case to heatsink		$R_{th(c-s)}$	-	0.125	-	
Weight			-	35	-	g
Mounting torque	Base plate to heatsink screw M4	M	1.0	-	1.5	N·m
	Electrode to terminal screw M4		1.0	-	1.5	N·m
Case style			SOT-227			

Ordering Information

<p>J</p> <p>JieJie Semiconductor Co., Ltd.</p> <p>Superfast rectifier diode</p>	<p>U</p> <p>Dual circuit module</p>	<p>100</p> <p>$I_{F(AV)}=100A$</p>	<p>K2</p>	<p>/12</p> <p>12:V_{RRM} 1200V</p>
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Mechanical Characteristics

1
2
3

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