JD70K2
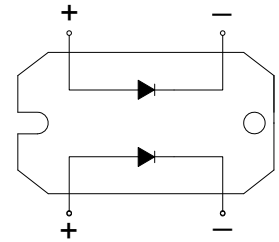
Description

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

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
			12	16	18	20	
Repetitive peak reverse voltage	T$_j$=25°C,I$_{RRM}$=5uA	V$_{RRM}$	1200	1600	1800	2000	V
Non-repetitive peak reverse voltage	T$_j$=25℃	V$_{RSM}$	1300	1700	1900	2100	V
Average forward current		I$_{F(AV)}$	70				A
Surge forward current	t$_P$=10ms,sin 180°, T$_j$=25℃	I$_{FSM}$	840				A
I^{2}t value	t$_P$=10ms,sin 180°, T$_j$=25℃	I^{2}t	3500				A^{2}s
Isolation voltage	50Hz,1min,RMS	V$_{iso}$	2500				V
Junction temperature range		T$_j$	-55~150				℃
Storage temperature range		T$_{STG}$	-55~150				℃

Electrical Characteristics(Packaged into SOT-227, unless otherwise specified, T$_{CASE}$=25℃)

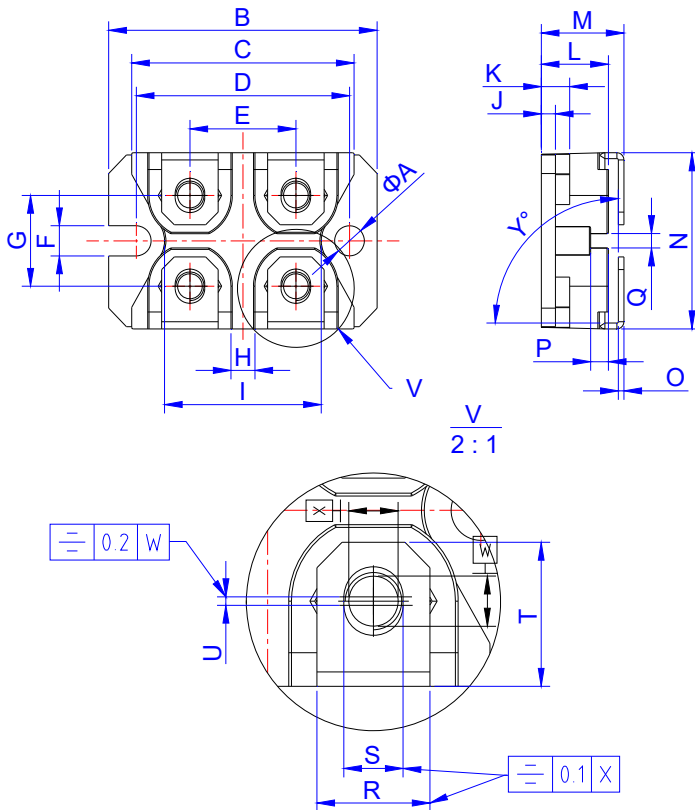| Parameter	Test Conditions	Symbol	Values			Unit
			Min.	Typ.	Max.	
Forward voltage	I$_F$=70A ,T$_j$=25℃	V$_F$	-	1.05	1.25	V
Reverse leakage current	V$_R$= V$_{RRM}$, T$_j$=25℃	I$_R$	-	-	5	μA
	V$_R$= V$_{RRM}$, T$_j$=150℃		-	-	1.5	mA

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_{thJC}	-	-	0.56	℃/W
Case to heatsink		R_{thCS}	-	0.10	-	
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	-	1.3	N·m
Case style			SOT-227			

Ordering Information

J D 70 K2 -12

JieJie Semiconductor Co.,Ltd

General purpose rectifier diode

$I_{F(AV)}$=70A

Dual circuit module

12:V_{RSM}≥1300V
16:V_{RSM}≥1700V
18:V_{RSM}≥1900V
20:V_{RSM}≥2100V

Mechanical Characteristics

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.1	4.2	4.4	0.161	0.165	0.173
B	38.0	38.2	38.4	1.496	1.504	1.512
C	31.1	31.5	31.9	1.224	1.240	1.256
D	30.1	30.2	30.3	1.185	1.189	1.193
E	14.8	15.0	15.2	0.583	0.591	0.598
F	4.1	4.2	4.4	0.161	0.165	0.173
G	12.3	12.5	12.7	0.484	0.492	0.500
H		4.2			0.165	
I		21.6			0.850	
J		2			0.079	
K		4.05			0.159	
L		9.5			0.374	
M	11.6	11.9	12.2	0.457	0.469	0.480
N	24.7	25.1	25.5	0.972	0.988	1.004
O		0.8			0.031	
P		2.6			0.102	
Q		1.7			0.067	
R		8			0.315	
S	4.1	4.2	4.4	0.161	0.165	0.173
T		10.7			0.421	
U		1			0.039	
Y	89°	90°	91°	89°	90°	91°

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

Package Information-SOT-227

OUTLINE	TUBE (PCS)	INNER BOX (PCS)	PER CARTON (PCS)
TUBE	8	80	160

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