

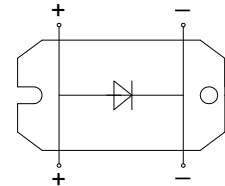
# JD150E

## Description

- 1) Low forward voltage drop
- 2) Fully insulated package
- 3) Easy to use and parallel
- 4) Industry standard outline
- 5) 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, $T_{CASE}=25^{\circ}C$ )

Parameter	Test Conditions	Symbol	Values			Unit
			16	18	20	
Junction temperature range		$T_j$	-40-150			$^{\circ}C$
Storage temperature range		$T_{STG}$	-40-125			$^{\circ}C$
Repetitive peak reverse voltage	$T_j=25^{\circ}C, I_{RRM}=5\mu A$	$V_{RRM}$	1600	1800	2000	V
Non-repetitive peak reverse voltage	$T_j=25^{\circ}C$	$V_{RSM}$	1700	1900	2100	V
Average forward current	$T_C=100^{\circ}C$	$I_{F(AV)}$	150			A
Surge forward current	$t_P=10ms, \sin 180^{\circ}, T_j=25^{\circ}C$	$I_{FSM}$	4200			A
$I^2t$ value	$t_P=10ms, \sin 180^{\circ}, T_j=25^{\circ}C$	$I^2t$	88200			$A^2s$
Isolation voltage	50Hz, 1min, RMS	$V_{iso}$	2500			V

## Electrical Characteristics (Packaged into SOT-227, unless otherwise specified, $T_{CASE}=25^{\circ}C$ )

Parameter	Test Conditions	Symbol	Values			Unit
			Min.	Typ.	Max.	
Forward voltage	$I_F=150A, T_j=25^{\circ}C$	$V_F$	-	1.1	1.25	V
Reverse leakage current	$V_R=V_{RRM}, T_j=25^{\circ}C$	$I_R$	-	-	200	$\mu A$
	$V_R=V_{RRM}, T_j=150^{\circ}C$		-	-	10	mA



## Rectifier Diode Module

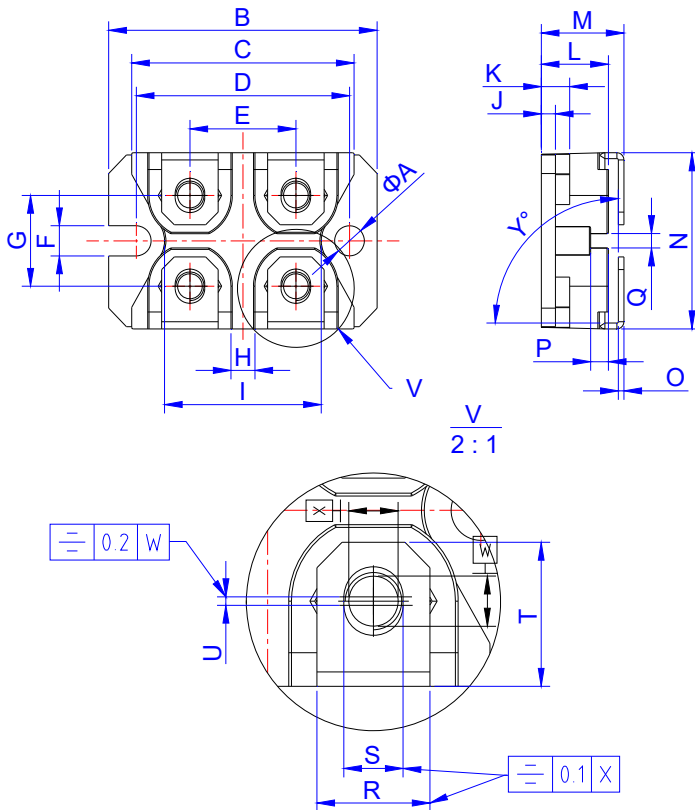
**Thermal Characteristics**(Packaged into SOT-227, unless otherwise specified,  $T_{CASE}=25^{\circ}C$ )

Parameter	Test Conditions	Symbol	Values			Unit
			Min.	Typ.	Max.	
Junction to case(per diode)		$R_{thJC}$	-	-	0.55	$^{\circ}C/W$
Case to heatsink		$R_{thCS}$	-	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	-	1.3	N·m
Case style			SOT-227			

### Ordering Information

<p>J</p> <p>JieJie Semiconductor Co.,Ltd</p> <p>General purpose rectifier diode</p>	<p>D</p>	<p>150</p> <p><math>I_{F(AV)}=150A</math></p>	<p>E</p> <p>Single chip</p>	<p>-16</p> <p>16:<math>V_{RSM} \geq 1700V</math>  18:<math>V_{RSM} \geq 1900V</math>  20:<math>V_{RSM} \geq 2100V</math></p>
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## 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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