

# JIEJIE MICROELECTRONICS CO., LTD.

## JSPK10150ACT

# 10A Schottky Barrier Rectifier

Rev.0.5

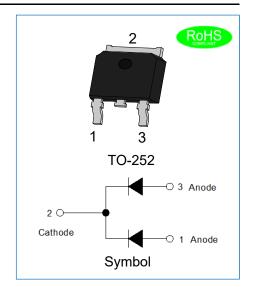
#### **DESCRIPTION**

- Plastic package has underwriters laboratories flammability classification 94V-0
- ♦ For surface mounted applications in order to optimize board space
- ♦ Lead free in compliance with EU RoHS 2011/65/EU directive
- ♦ Low forward voltage drop
- ♦ Low power losses, high efficiency operation
- ♦ High current capability and surge capability



♦ Case: TO-252 molded plastic

→ Terminals: Solder plated, solderable per J-STD-002



#### ABSOLUTE MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	JSPK10150ACT	Unit	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	150	V	
Maximum crest working reverse voltage	V <sub>RWM</sub>	150	V	
Average ferward current	I <sub>F(AV)</sub>	5(per leg)	А	
Average forward current		10(per device)		
Peak forward surge current: 8.3ms single half sine- wave superimposed on rated load	Ігѕм	100	А	
Typical junction capacitance, V <sub>R</sub> =5V <sub>DC</sub> ,f=1MHz	Сл	110	pF	
Operating junction temperature range	Tj	-55 to +150	$^{\circ}$	
Storage temperature range	T <sub>stg</sub>	-55 to +150	$^{\circ}$	

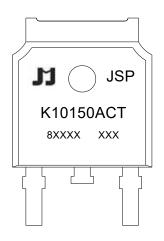
Parameter		Symbol	Min.	Тур.	Max.	Unit
	I <sub>F</sub> =5A,T <sub>J</sub> =25℃		1	0.83	0.9	V
Forward voltage	I <sub>F</sub> =5A,T <sub>J</sub> =125℃	VF	-	0.67	8.0	٧
	I <sub>F</sub> =5A,T <sub>J</sub> =150°C		-	0.65	0.75	V
	TJ=25°C		-	0.1	1	mA
Reverse current at rated DC blocking voltage	TJ=125℃	I <sub>R</sub>	-	1.1	7	
area and a same	TJ=150℃		-	4	30	



# THERMAL RESISTANCES

Symbol	Parameter	JSPK10150ACT	Unit
R <sub>th(j-c)</sub>	Junction to case	4.5	°C/W

### **MARKING**

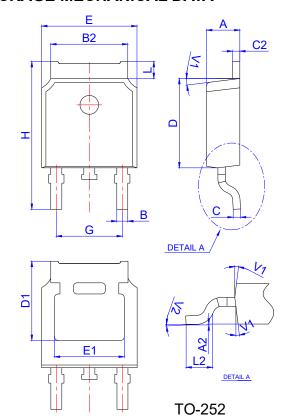


JS	Schottky Barrier Rectifier	
Р	Planar technology	
K	Package: TO-252	
10	I <sub>F(AV)</sub> =10A	
150	V <sub>RRM</sub> :150V	
Α	Version	
СТ	Common cathode	

8	Year code(7:2017, 8:2018,)
XX	Week code
XX	Chip code
XXX	Package lot number

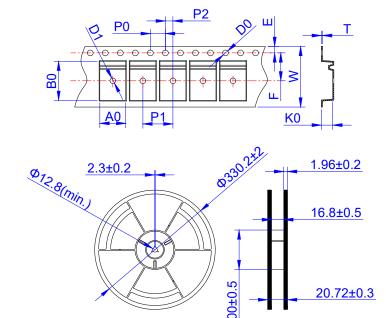


# PACKAGE MECHANICAL DATA



	Dimensions					
Ref.		Millimete	rs			
	Min.	Тур.	Max.	Min.	Тур.	Max.
Α	2.10		2.50	0.083		0.098
A2	0		0.15	0		0.006
В	0.66		0.86	0.026		0.034
B2	5.18		5.48	0.202		0.216
С	0.40		0.60	0.016		0.024
C2	0.44		0.58	0.017		0.023
D	5.90		6.30	0.232		0.248
D1	5.30REF			0.209REF		
E	6.40		6.80	0.252		0.268
E1	4.63			0.182		
G	4.47		4.67	0.176		0.184
Н	9.50		10.70	0.374		0.421
L	1.09		1.21	0.043		0.048
L2	1.35		1.65	0.053		0.065
V1		7°			7°	
V2	0°		6°	0°		6°

## **REEL SPECIFICATION -TO-252**



Ref.	Dimensions			
Nei.	Millimeters	Inches		
W	Max:16.3	Max:0.642		
Е	1.75±0.10	0.069±0.004		
F	7.50±0.10	0.295±0.004		
D0	1.55±0.05	0.061±0.002		
D1	Min:1.50	Min:0.059		
P0	4.00±0.10	0.157±0.004		
P1	8.00±0.10	0.315±0.004		
P2	2.00±0.10	0.079±0.004		
A0	6.90±0.10	0.272±0.004		
В0	10.50±0.10	0.413±0.004		
K0	2.70±0.10	0.106±0.004		
Т	T 0.30±0.05 0.012±0.00			

OUTLINE	UNIT WEIGHT (g/PCS) TYP	REEL (PCS)	PER CARTON (PCS)	TAPE & REEL
TAPING	0.39	2,500	25,000	13inch



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