



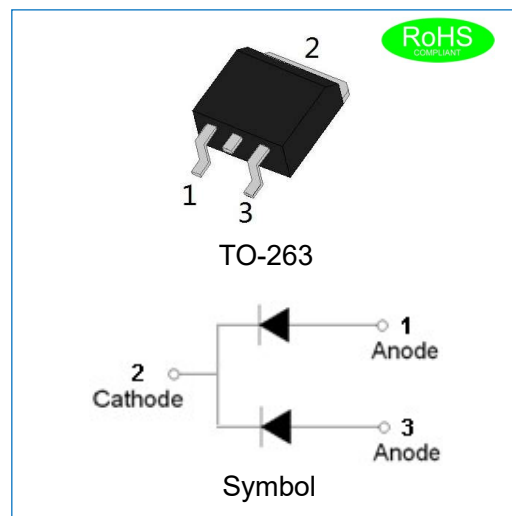
## JSPE3045ACT

### 30A Schottky Barrier Rectifier

Rev.3.6

#### 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



#### MECHANICAL DATA

- ✧ Case: TO-263 molded plastic
- ✧ Terminals: Solder plated, solderable per J-STD-002

#### ABSOLUTE MAXIMUM RATING (Rating at 25°C ambient temperature unless otherwise specified.)

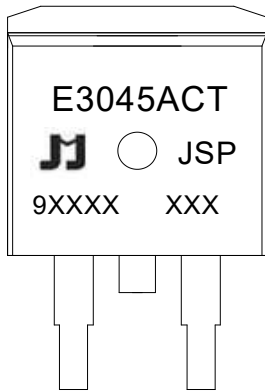
Parameter	Symbol	JSPE3045ACT	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	45	V
Maximum RMS voltage	$V_{RMS}$	32	V
Maximum DC blocking voltage	$V_{DC}$	45	V
Average forward current	$I_{F(AV)}$	30	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	200	A
Operating junction temperature range	$T_j$	-55 to +125	°C
Storage temperature range	$T_{stg}$	-55 to +150	°C

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

Parameter	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=15A$ $V_F$	-	-	0.65	V
Reverse current at rated DC blocking voltage	$T_A=25^\circ C$ $I_R$	-	-	0.1	mA
		$T_A=100^\circ C$	-	-	
Junction capacitance	$V_R=4.0V, f=1MHz$ $C_J$	-	800	-	pF

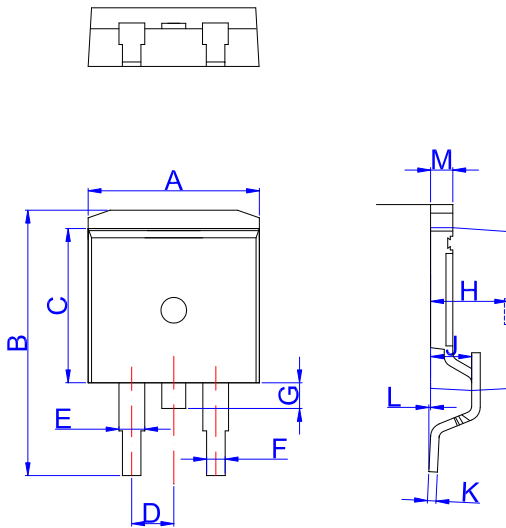
#### THERMAL RESISTANCES

Symbol	Parameter	JSPE3045ACT	Unit
$R_{th(j-c)}$	Thermal resistances from junction to case	2.0	°C/W

**MARKING**


JS	Schottky Barrier Rectifier
P	Planar technology
E	Package: TO-263
30	$I_{F(AV)}=30A$
45	$V_{RRM}:45V$
A	Version
CT	Common cathode

9	Year code(8:2018,9:2019,.....)
XX	Week code
XX	Chip code
XXX	Package lot number

**PACKAGE MECHANICAL DATA**


TO-263

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	9.90		10.20	0.390		0.402
B	14.70		15.80	0.579		0.622
C	9.4		9.6	0.37		0.378
D		2.54			0.100	
E	1.20		1.40	0.047		0.055
F	0.75		0.85	0.029		0.033
G			1.75			0.069
H	4.40		4.70	0.173		0.185
J	2.30		2.70	0.091		0.106
K	0.38		0.55	0.015		0.022
L	0	0.10	0.25	0	0.004	0.010
M	1.25		1.35	0.049		0.053

**PACKAGE INFORMATION-TO-263**

OUTLINE	UNIT WEIGHT (g/PCS) TYP	TUBE (PCS)	PER CARTON (PCS)
TUBE	1.514	50	5,000

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