# JIEJIE MICROELECTRONICS CO., LTD.

# JEFR0308SC EPI FAST SOFT RECOVERY RECTIFIER

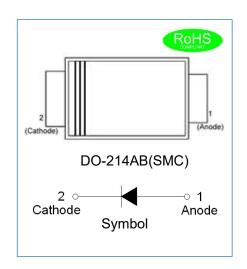
Rev.1.1

#### **DESCRIPTION**

- Plastic package has underwriters laboratory flammability classification 94V-0
- ♦ Lead free in comply with EU RoHS 2011/65/EU directives
- ♦ Low reverse leakage current
- ♦ Fast recovery time and soft recovery characteristics
- ♦ Low recovery loss

#### **MECHANICAL DATA**

- ♦ Case: JEDEC DO-214AB molded plastic
- ♦ Terminals: Solder plated, solderable per J-STD-002
- ♦ Weight:0.26gram



# **ABSOLUTE MAXIMUM RATING** (Rating at 25℃ case temperature unless otherwise specified.)

Parameter	Symbol	JEFR0308SC	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	800	٧
Maximum RMS voltage	V <sub>RMS</sub>	560	V
Maximum DC blocking voltage	V <sub>DC</sub>	800	V
Maximum average forward current	I <sub>F(AV)</sub>	3.0	Α
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	125	А
Operating junction and storage temperature range	$T_{j}, T_{stg}$	-55 to +150	$^{\circ}$

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

Parameter	Symbol	Min.	Тур.	Max.	Unit	
Maximum forward voltage @ I <sub>F</sub> =3A		VF	-	-	1.7	V
Maximum DC reverse current at rated DC blocking voltage	T <sub>j</sub> =25℃	I <sub>R</sub>		5		
	T <sub>j</sub> =150°C			-	200	μA
Maximum reverse recovery time	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, I <sub>rr</sub> =0.25A	t <sub>rr</sub>	-	-	75	ns

## THERMAL RESISTANCES

Symbol	Parameter	JEFR0308SC	Unit
R <sub>th(j-L)</sub>	Junction to lead	15	°C/W

Note1: Thermal resistance from junction to lead mounted on P.C.B. with 8.0 mm x 8.0 mm copper pad areas.

#### **MARKING**



FR	Fast Recovery Rectifier	
03	I <sub>F(AV)</sub> =3A	
08	V <sub>RRM</sub> :800V	

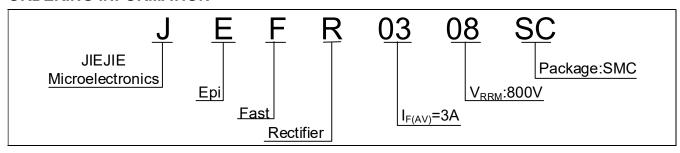
 $\underline{\mathbf{x}}$ H1: Month, 1, 2, 3  $\sim$  9, A, B, C

## 3<u>x</u>1:

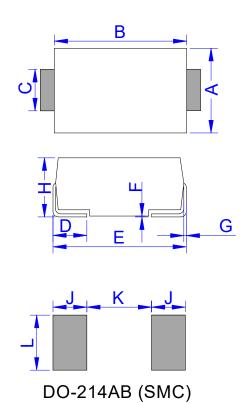
2018	2019	2020	2021	2022	2023	2024
Н	I	J	K	L	М	N
2025	2026	2027	2028	2029	2030	
0	Р	Q	R	S	Т	

3Hx: Batch number

#### **ORDERING INFORMATION**

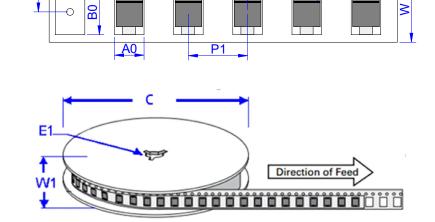


# PACKAGE MECHANICAL DATA



	Dimensions			
Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
Α	5.75	6.25	0.226	0.246
В	6.90	7.40	0.272	0.291
С	2.75	3.25	0.108	0.128
D	0.95	1.52	0.037	0.060
Е	7.70	8.20	0.303	0.323
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
Н	2.15	2.62	0.085	0.103
J	2.40		0.094	
K		4.20		0.165
L	3.30		0.130	

# TAPE AND REEL SPECIFICATION-SMC

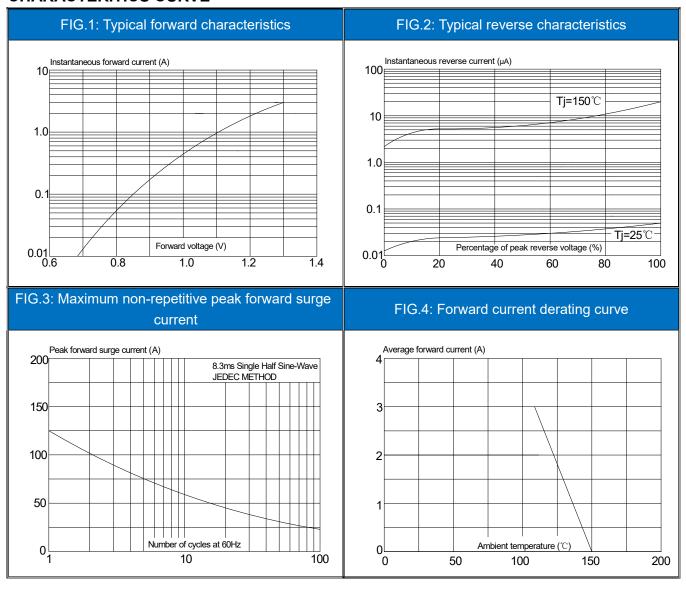


D-f	Dimensions			
Ref.	Millimeters	Inches		
A0	6.05 ± 0.3	0.238 ± 0.012		
В0	8.31 ± 0.3	0.327 ± 0.012		
С	330.0	13.0		
D0	1.55 ± 0.1	0.061 ± 0.004		
E	1.75 ± 0.2	0.069 ± 0.008		
E1	13.3 ± 0.3	0.524 ± 0.012		
F	7.50 ± 0.2	0.295 ± 0.008		
P0	4.00 ± 0.2	0.157 ± 0.008		
P1	8.00 ± 0.2	0.3145 ± 0.008		
P2	2.00 ± 0.2	0.079 ± 0.008		
W	16.0 ± 0.2	0.630 ± 0.008		
W1	19.7 ± 2.0	0.776 ± 0.079		

OUTLINE	UNIT WEIGHT (g/PCS) typ.	REEL (PCS)	PER CARTON (PCS)	REEL DIAMETERS (mm)
TAPING	0.26	3,000	48,000	330

Cathode

# **CHARACTERITICS CURVE**





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