



## JEUR0406SC EPI ULTRA FAST SOFT RECOVERY RECTIFIER

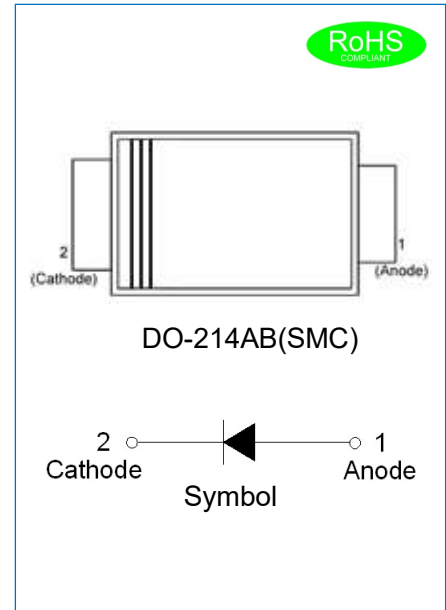
Rev.1.3

### 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
- ✧ Ultrafast recovery time and soft recovery characteristics
- ✧ Low recovery loss
- ✧ Applications for high frequency rectification, switching mode converters and inverters in computer, automotive and telecommunication

### MECHANICAL DATA

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



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

Parameter	Symbol	JEUR0406SC	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	600	V
Maximum RMS voltage	$V_{RMS}$	420	V
Maximum DC blocking voltage	$V_{DC}$	600	V
Average forward current at $T_C=140^\circ\text{C}$	$I_{F(AV)}$	4	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	110	A
Operating junction and storage temperature range	$T_j, T_{stg}$	-55 to +150	°C

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

Parameter		Symbol	Min.	Typ.	Max.	Unit
Forward voltage	$I_F=4A, T_J=25^\circ C$	$V_F$	-	-	1.25	V
	$I_F=4A, T_J=150^\circ C$		-	-	1.05	
DC reverse current at rated DC blocking voltage	$T_J=25^\circ C$	$I_R$	-	-	5	$\mu A$
	$T_J=150^\circ C$		-	-	200	
Reverse recovery time	$I_F=0.5A, I_R=1A, I_{rr}=0.25A$	$t_{rr}$	-	-	50	ns

**THERMAL RESISTANCES**

Symbol	Parameter	Min.	Typ.	Max.	Unit
$R_{th(j-a)}$	Junction to ambient thermal resistance per diode	-	45	-	$^\circ C/W$
$R_{th(j-c)}$	Junction to case thermal resistance per diode	-	8.5	-	$^\circ C/W$

**MARKING**



UR	EPI Ultrafast Recovery Rectifier
04	$I_{F(AV)}=4A$
06	$V_{RRM}:600V$

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

$3\underline{x}1$ :

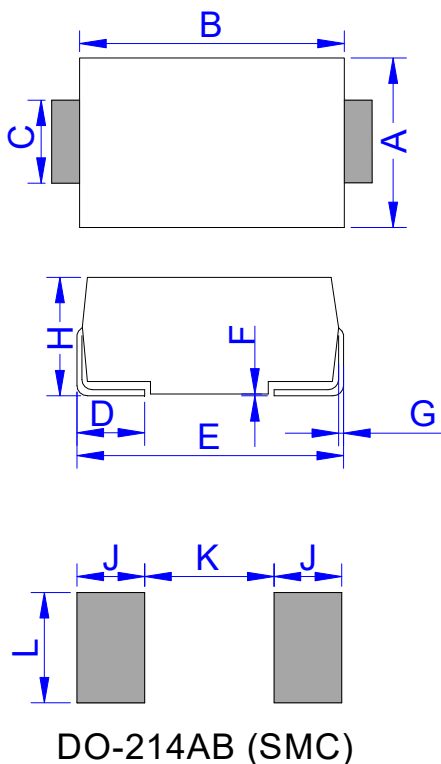
2018	2019	2020	2021	2022	2023	2024
H	I	J	K	L	M	N
2025	2026	2027	2028	2029	2030	...
O	P	Q	R	S	T	...

$3H\underline{x}$ : Batch number

**ORDERING INFORMATION**

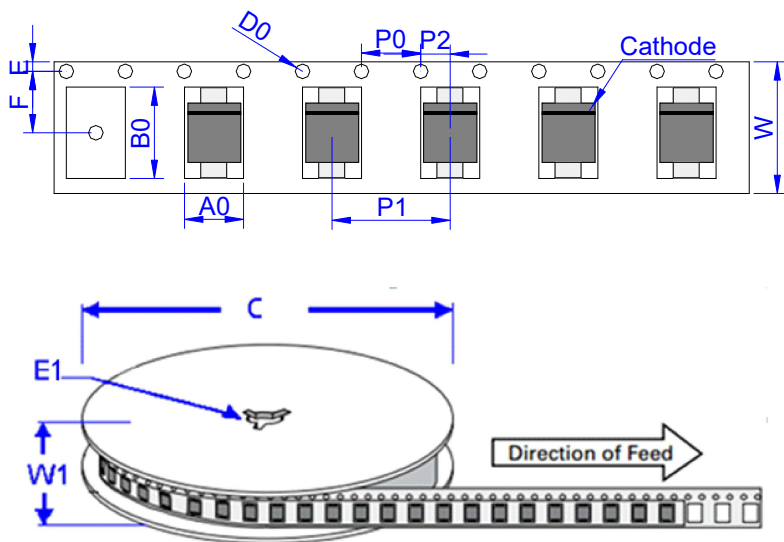
<b>J</b>	<b>E</b>	<b>U</b>	<b>R</b>	<b>04</b>	<b>06</b>	<b>SC</b>
JIEJIE Microelectronics	Epi Ultrafast	Rectifier		$I_{F(AV)}=4A$	$V_{RRM}:600V$	Package:SMC

PACKAGE MECHANICAL DATA



Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	5.75	6.25	0.226	0.246
B	6.90	7.40	0.272	0.291
C	2.75	3.25	0.108	0.128
D	0.95	1.52	0.037	0.060
E	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
H	2.15	2.62	0.085	0.103
J	2.40		0.094	
K		4.20		0.165
L	3.30		0.130	

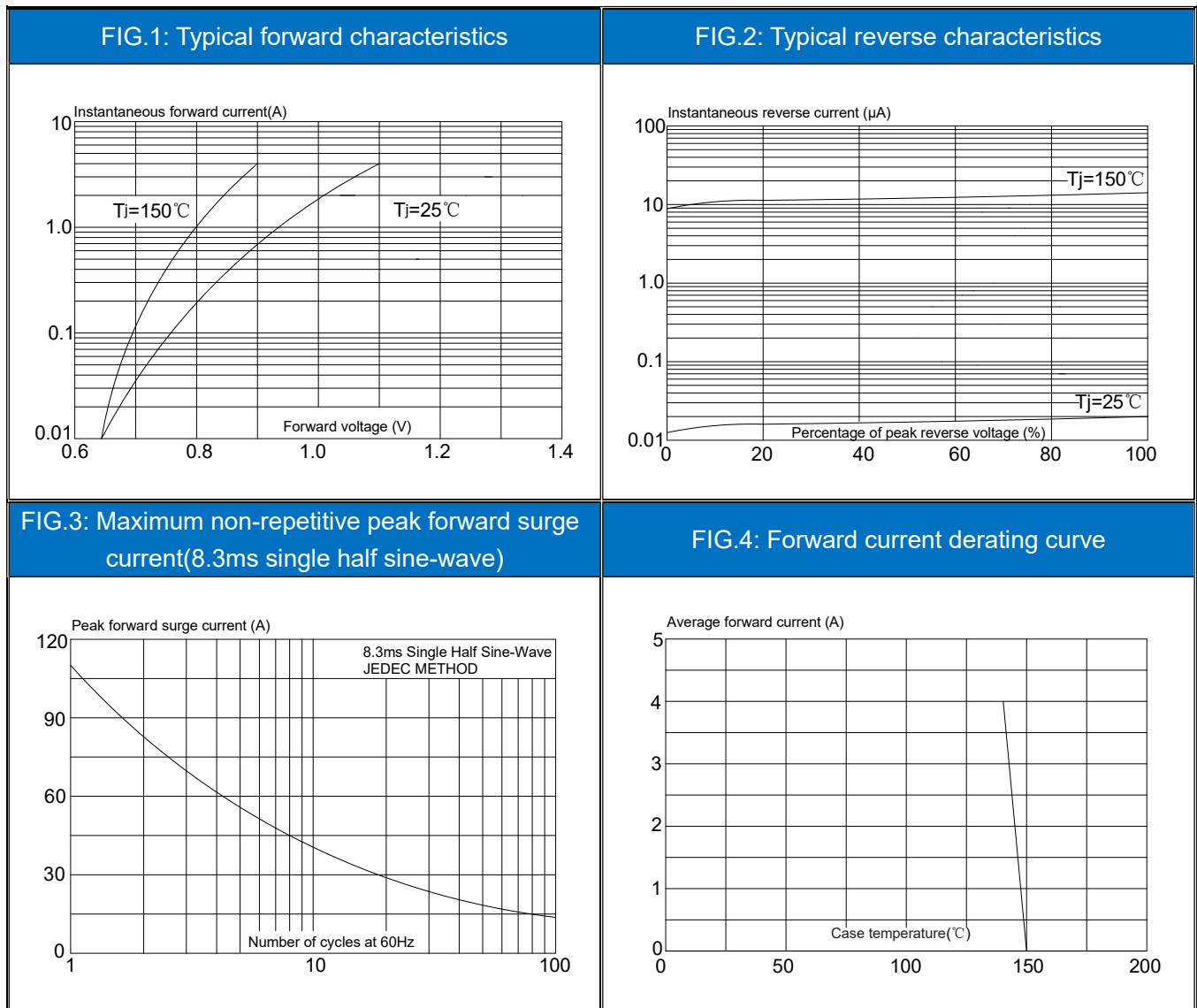
TAPE AND REEL SPECIFICATION-SMC



Ref.	Dimensions	
	Millimeters	Inches
A0	6.05 ± 0.3	0.238 ± 0.012
B0	8.31 ± 0.3	0.327 ± 0.012
C	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

CHARACTERISTICS CURVE




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