

**JECR0202FL****EPI HYPERFAST SOFT RECOVERY RECTIFIER**

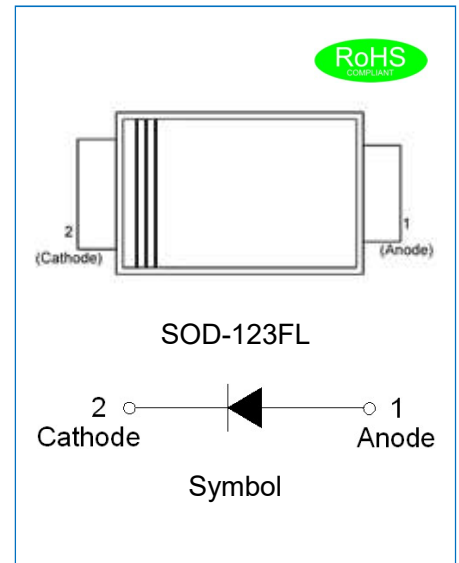
Rev.1.1

**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
- ✧ Hyperfast recovery time and soft recovery characteristics
- ✧ Low recovery loss

**MECHANICAL DATA**

- ✧ Case: SOD-123FL molded plastic
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Polarity: Color band denotes cathode end
- ✧ Weight: 0.0144 gram

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

Parameter	Symbol	JECR0202FL	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	V
Maximum RMS voltage	$V_{RMS}$	140	V
Maximum DC blocking voltage	$V_{DC}$	200	V
Maximum average forward current at $T_A=85^{\circ}\text{C}$	$I_{F(AV)}$	2	A
Peak forward surge current: 10ms single half sine-wave superimposed on rated load	$I_{FSM}$	45	A
Operating junction and storage temperature range	$T_j, T_{stg}$	-55 to +150	$^{\circ}\text{C}$

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

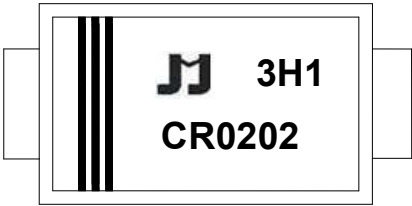
Parameter		Symbol	Min.	Typ.	Max.	Unit
Maximum forward voltage	$I_F=2\text{A}, T_j=25^{\circ}\text{C}$	$V_F$	-	-	1.05	V
Maximum DC reverse current at rated DC blocking voltage	$T_j=25^{\circ}\text{C}$	$I_R$	-	-	5	$\mu\text{A}$
	$T_j=150^{\circ}\text{C}$		-	-	200	
Maximum reverse recovery time	$I_F=0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25\text{A}$	$t_{rr}$	-	-	25	ns

THERMAL RESISTANCES

Symbol	Parameter	Min.	Typ.	Max.	Unit
$R_{th(j-a)}$	Junction to ambient (note1)	-	-	170	°C/W

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

MARKING



CR	Hyperfast Recovery Rectifier
02	$I_{F(AV)}=2A$
02	$V_{RRM}:200V$

xH1: Month, 1、2、3 ~ 9、A、B、C

3x1:

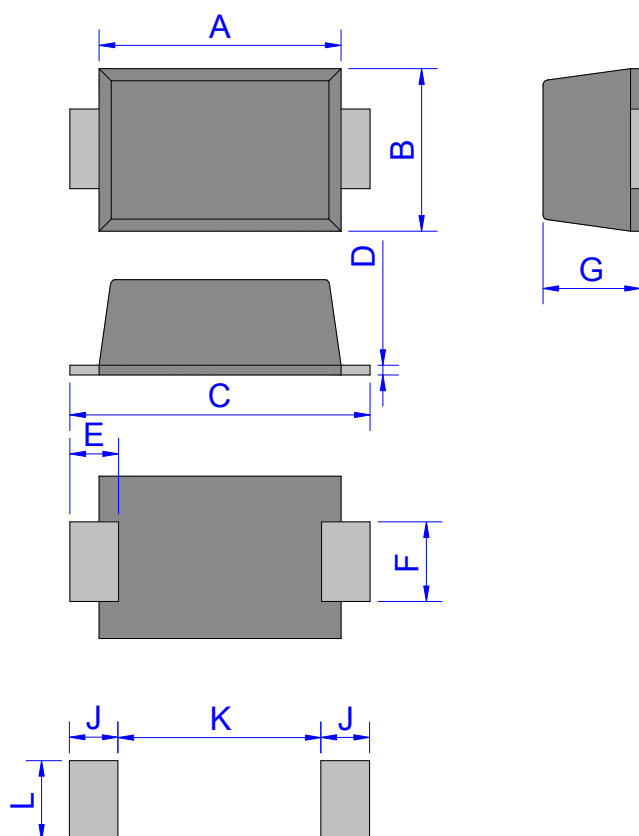
2018	2019	2020	2021	2022	2023	2024
H	I	J	K	L	M	N
2025	2026	2027	2028	2029	2030	...
O	P	Q	R	S	T	...

3Hx: Batch number

ORDERING INFORMATION

J	E	C	R	02	02	FL
JIEJIE Microelectronics	Epi Hyperfast	Rectifier		$I_{F(AV)}=2A$	$V_{RRM}:200V$	Package:SOD-123FL

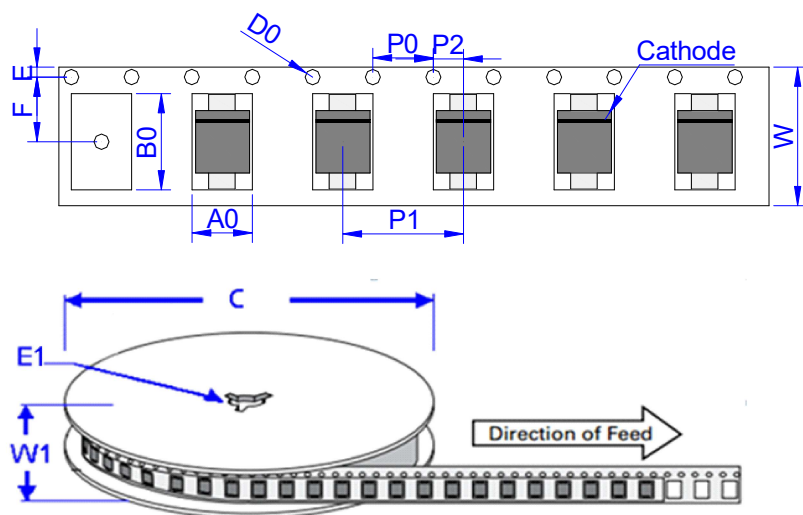
## PACKAGE MECHANICAL DATA



SOD-123FL

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.60	3.00	0.102	0.118
B	1.60	2.00	0.063	0.079
C	3.45	3.95	0.136	0.156
D	0.10	0.25	0.004	0.01
E	0.3	0.9	0.012	0.035
F	0.80	1.20	0.031	0.047
G	0.70	1.00	0.028	0.039
J	1.30		0.051	
K		1.70		0.067
L	1.30		0.051	

## TAPE AND REEL SPECIFICATION-SOD-123FL



Ref.	Dimensions	
	Millimeters	Inches
A0	1.95 ± 0.3	0.077 ± 0.012
B0	3.95 ± 0.3	0.156 ± 0.012
C	178	7.0
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	3.50 ± 0.2	0.138 ± 0.008
P0	4.00 ± 0.2	0.157 ± 0.008
P1	4.00 ± 0.2	0.157 ± 0.008
P2	2.00 ± 0.2	0.079 ± 0.008
W	8.0 ± 0.2	0.315 ± 0.008
W1	11.5 ± 1.0	0.453 ± 0.039

OUTLINE	UNIT WEIGHT (g/PCS) typ.	REEL (PCS)	PER CARTON (PCS)	REEL DIAMETERS (mm)
TAPING	0.0144	3,000	150,000	178

## CHARACTERISTICS CURVE

FIG.1: Typical forward characteristics

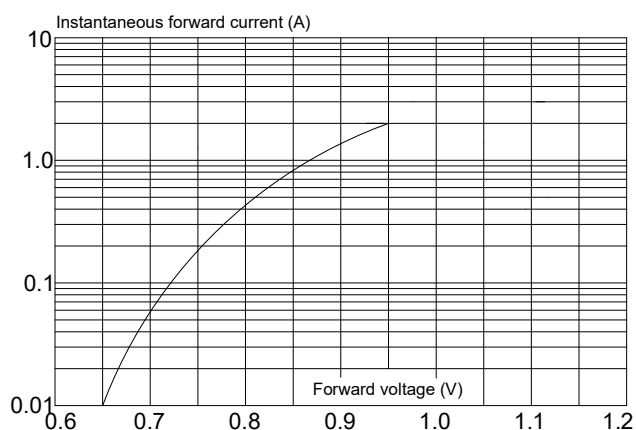


FIG.2: Typical reverse characteristics

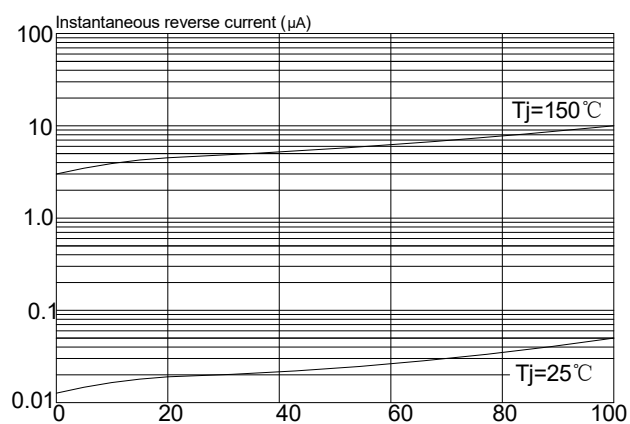


FIG.3: Maximum non-repetitive peak forward surge current

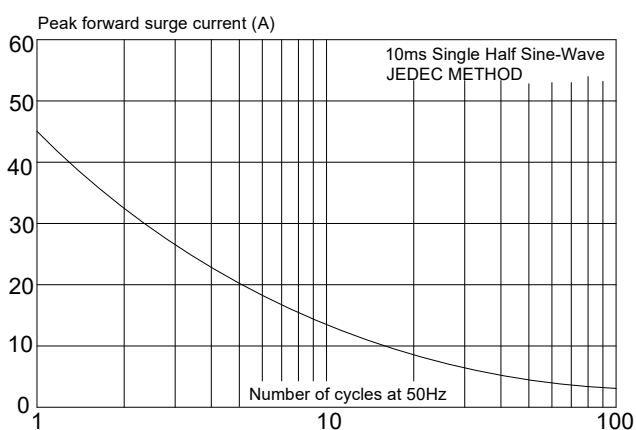
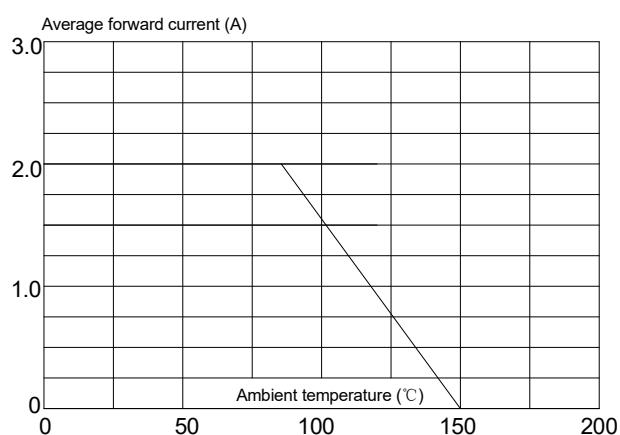


FIG.4: Forward current derating curve



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