



## JEER1006ECT EPI SUPERFAST RECOVERY RECTIFIER

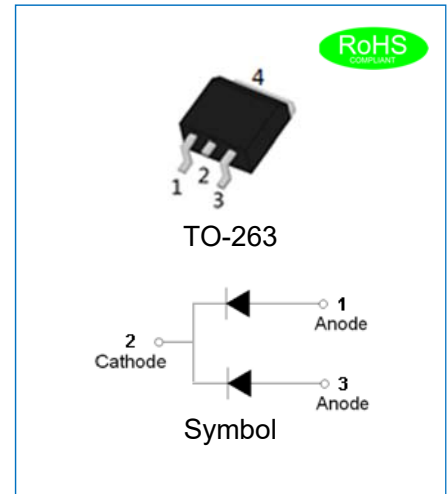
Rev.1.6

### 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
- ✧ Superfast recovery time and soft recovery characteristics
- ✧ Low recovery loss

### MECHANICAL DATA

- ✧ Case: TO-263 molded plastic over passivated junction
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Weight:1.55 gram



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

Parameter	Symbol	JEER1006ECT	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 $T_C=100^\circ\text{C}$	$I_{F(AV)}$	10	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load(per diode)	$I_{FSM}$	75	A
Junction temperature and storage temperature range	$T_j, T_{stg}$	-55 to +150	$^\circ\text{C}$

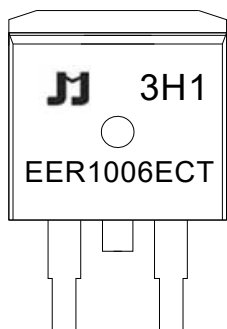
### ELECTRICAL CHARACTERISTICS (Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward voltage	$I_F=5A, T_j=25^\circ\text{C}$	-	-	1.7	V
Reverse current at rated DC blocking voltage	$T_j=25^\circ\text{C}$	-	-	5	$\mu\text{A}$
	$T_j=150^\circ\text{C}$	-	-	200	
Reverse recovery time	$I_F=0.5A, I_R=1A, I_{rr}=0.25A$	-	-	35	ns

### THERMAL RESISTANCES

Symbol	Parameter	Min.	Typ.	Max.	Unit
$R_{th(j-c)}$	Thermal resistance from junction to case	-	2.0	-	$^\circ\text{C}/\text{W}$

## MARKING



EER	EPI Superfast Recovery Rectifier
10	$I_{F(AV)}=10A$
06	$V_{RRM}:600V$
E	Package:TO-263
CT	Common cathode

xH1: Month, 1/2/3~9/A/B/C

3x1:

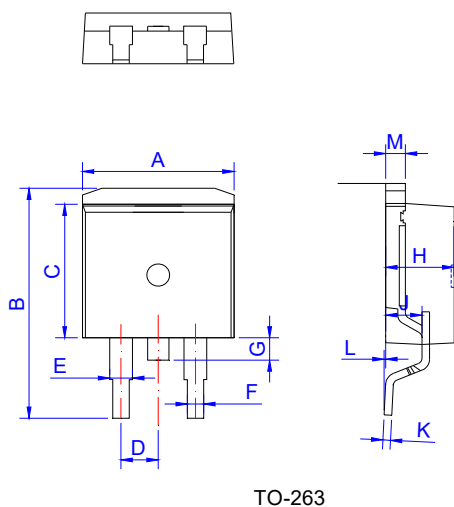
2018	2019	2020	2021	2022	2023	2024
H	I	J	K	L	M	N
2025	2026	2027	2028	2029	2030	...
O	P	Q	R	S	T	...

3Hx: Batch number

## ORDERING INFORMATION

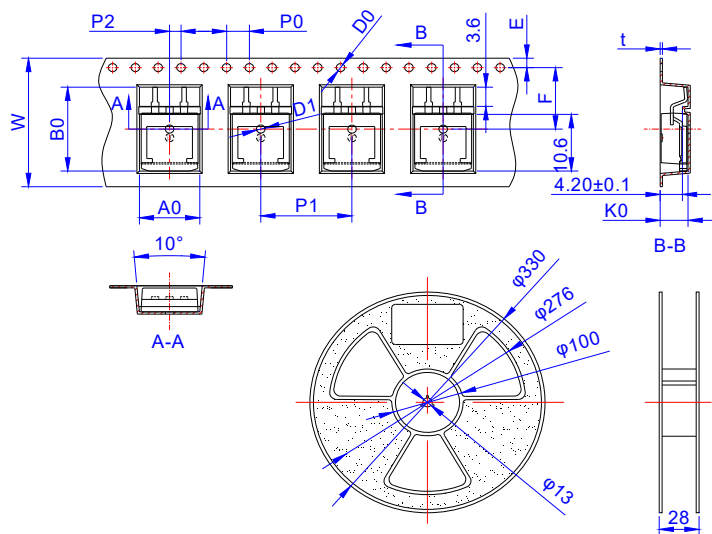
<b>J</b>	<b>E</b>	<b>E</b>	<b>R</b>	<b>10</b>	<b>06</b>	<b>E</b>	<b>CT</b>	<b>-R</b>
JieJie Microelectronics	Epi Superfast	Rectifier	$I_{F(AV)}=10A$		$V_{RRM}:600V$	Package:TO-263	Common cathode	Null:Tube R:Tape and reel

## PACKAGE MECHANICAL DATA



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	8.80		9.60	0.346		0.378
D		2.54			0.100	
E	1.20		1.40	0.047		0.055
F	0.75		0.85	0.030		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	1.17		1.37	0.046		0.054

## TAPE AND REEL SPECIFICATION-TO-263



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
W	23.70	24.00	24.30	0.933	0.945	0.957
E	1.65	1.75	1.85	0.065	0.069	0.073
F	11.40	11.50	11.60	0.449	0.453	0.457
D0	-	1.50	1.60	-	0.059	0.063
D1	-	1.50	1.60	-	0.059	0.063
P0	3.90	4.00	4.10	0.154	0.157	0.161
P1	15.90	16.00	16.10	0.626	0.630	0.634
P2	1.90	2.00	2.10	0.075	0.079	0.083
A0	10.80	10.90	11.00	0.425	0.429	0.433
B0	16.20	16.30	16.40	0.638	0.642	0.646
K0	4.80	4.90	5.00	0.189	0.193	0.197
t	0.35	0.40	0.45	0.014	0.016	0.018

## PACKAGE INFORMATION-TO-263

PART No.	UNIT WEIGHT (g/PCS) TYP	TUBE (PCS)	PER CARTON (PCS)
JEER1006ECT	1.55	50	5,000
PART No.	UNIT WEIGHT (g/PCS) TYP	REEL (PCS)	PER CARTON (PCS)
JEER1006ECT-R	1.55	800	4,000

## CHARACTERISTICS CURVE

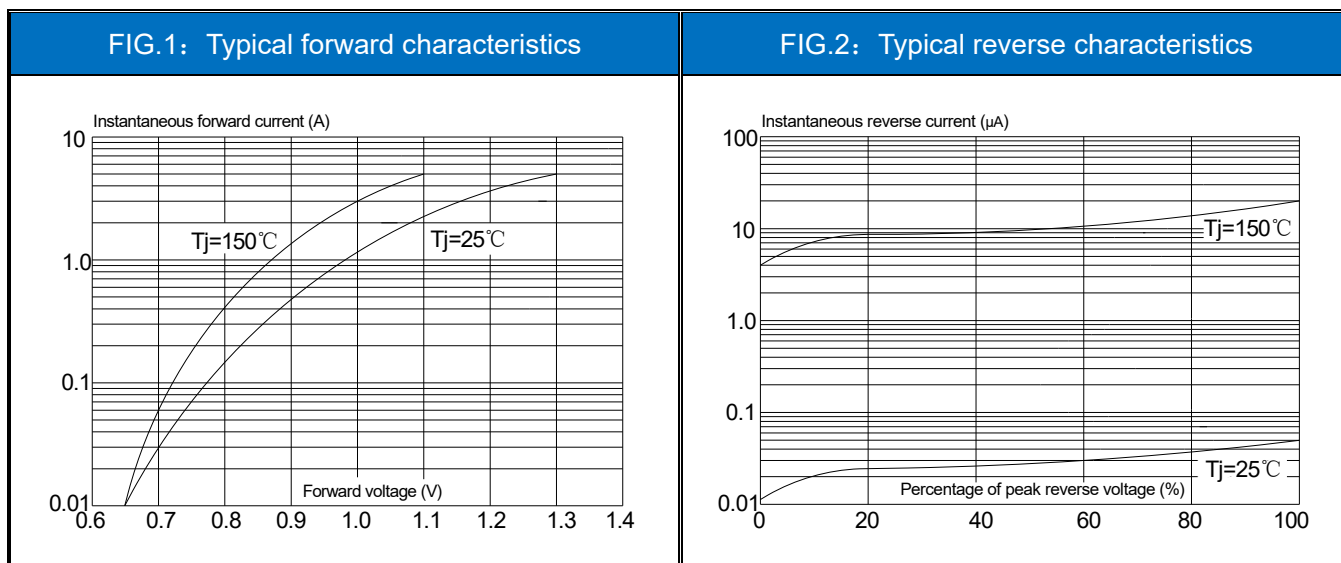


FIG.3: Maximum non-repetitive peak forward surge current(8.3ms single half sine-wave)

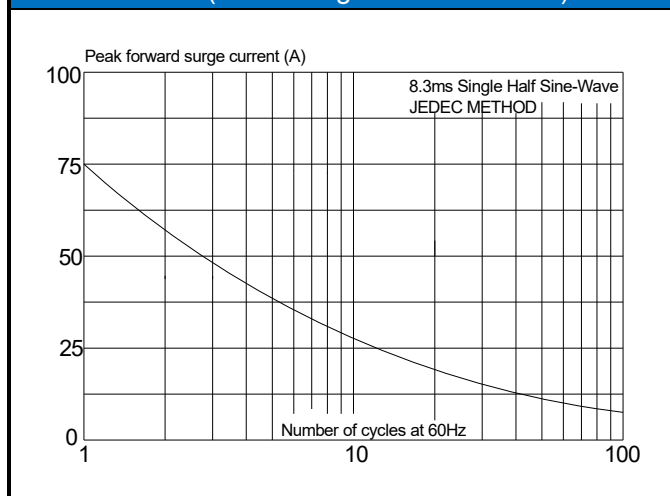
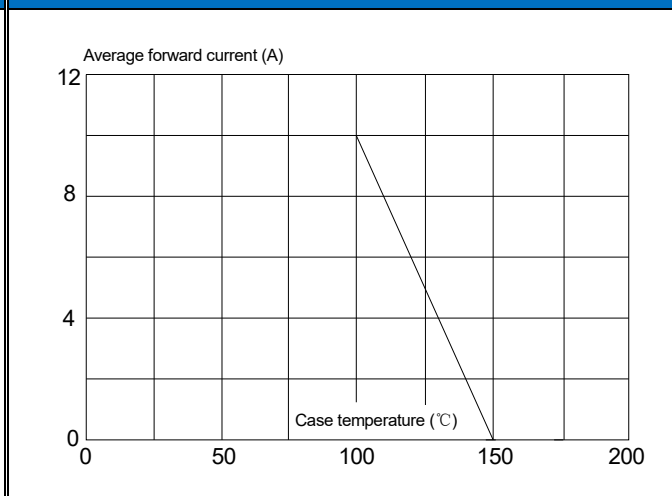


FIG.4: Forward current derating curve




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