



JEER1006BCT

EPI SUPERFAST SOFT RECOVERY RECTIFIER

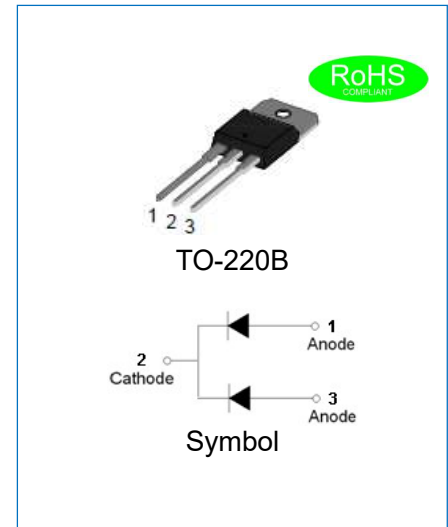
Rev.1.3

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

MECHANICAL DATA

- ✧ Case: TO-220B molded plastic over passivated junction
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Weight: 1.94gram



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

Parameter	Symbol	JEER1006BCT	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
Maximum average forward current at $T_C=100^{\circ}C$	$I_{F(AV)}$	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	$^{\circ}C$

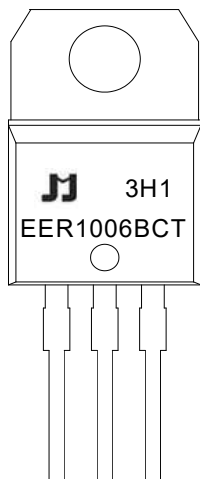
ELECTRICAL CHARACTERISTICS (Rating at 25°C case temperature unless otherwise specified.)

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

THERMAL RESISTANCES

Symbol	Parameter	Min.	Typ.	Max.	Unit
$R_{th(j-c)}$	Thermal resistance from junction to case	-	3.5	-	$^{\circ}\text{C/W}$

MARKING



EER	EPI Super Fast Recovery Rectifier
10	$I_{F(AV)}=10\text{A}$
06	$V_{RRM}: 600\text{V}$
B	Package: TO-220B
CT	Common cathode

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

$3\underline{x}1$:

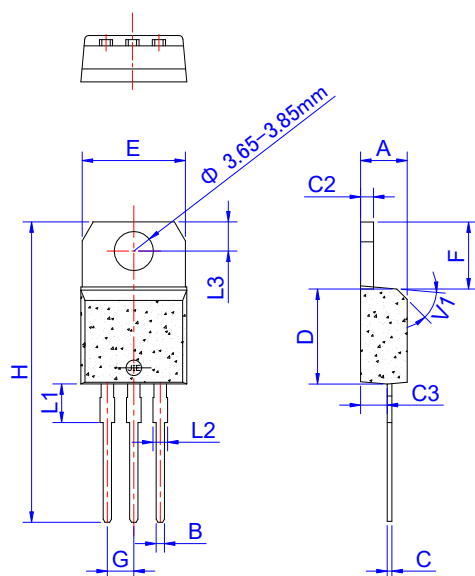
2018	2019	2020	2021	2022	2023	2024
H	I	J	K	L	M	N
2025	2026	2027	2028	2029	2030	...
O	P	Q	R	S	T	...

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

ORDERING INFORMATION

J	E	E	R	10	06	B	CT
JIEJIE Microelectronics	Epi	Superfast	Rectifier	$I_{F(AV)}=10\text{A}$	$V_{RRM}:600\text{V}$	Package:TO-220B	Common cathode

PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.60	0.173		0.181
B	0.61		0.88	0.024		0.035
C	0.46		0.70	0.018		0.028
C2	1.21		1.32	0.048		0.052
C3	2.40		2.72	0.094		0.107
D	8.60		9.70	0.339		0.382
E	9.60		10.4	0.378		0.409
F	6.20		6.60	0.244		0.260
G	2.40		2.70	0.094		0.106
H	28.0		29.8	1.102		1.173
L1		3.75			0.147	
L2	1.14		1.70	0.045		0.067
L3	2.65		2.95	0.104		0.116
V1		45°			45°	

PACKAGE INFORMATION-TO-220B

OUTLINE	UNIT WEIGHT (g/PCS) typ.	TUBE (PCS)	PER CARTON (PCS)
TUBE	1.94	50	5,000

CHARACTERISTICS CURVE

FIG.1: Typical forward characteristics

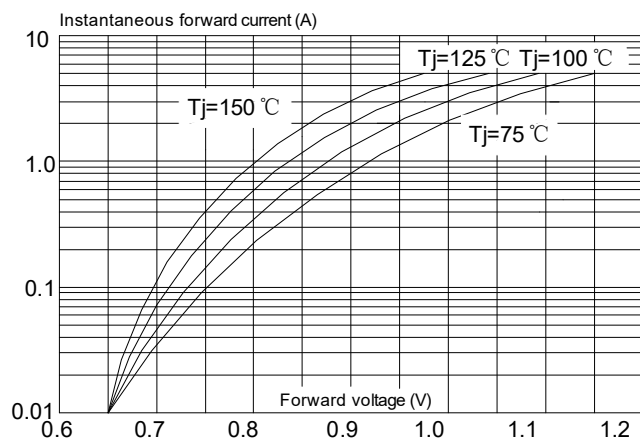


FIG.2: Typical reverse characteristics

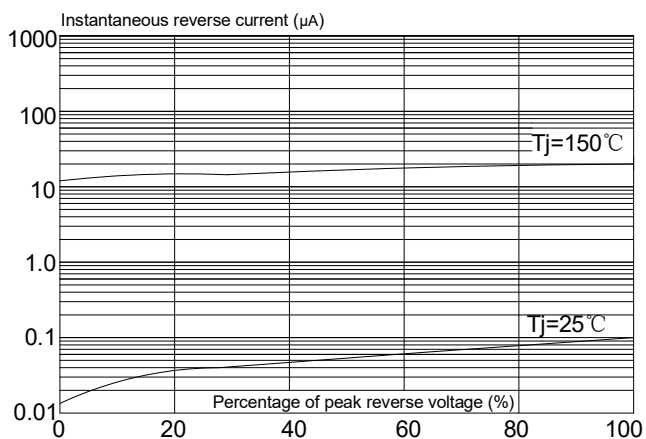


FIG.3: Maximum non-repetitive peak forward surge current

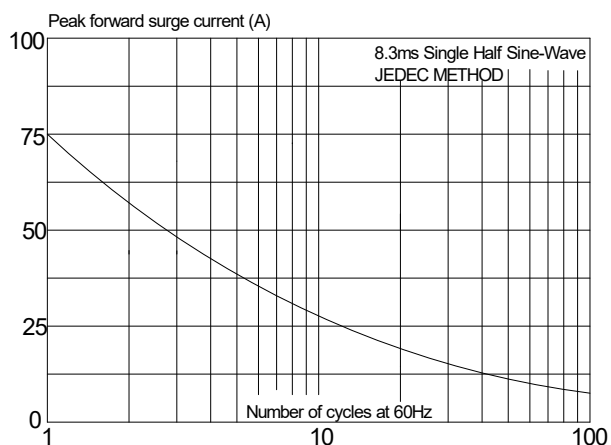
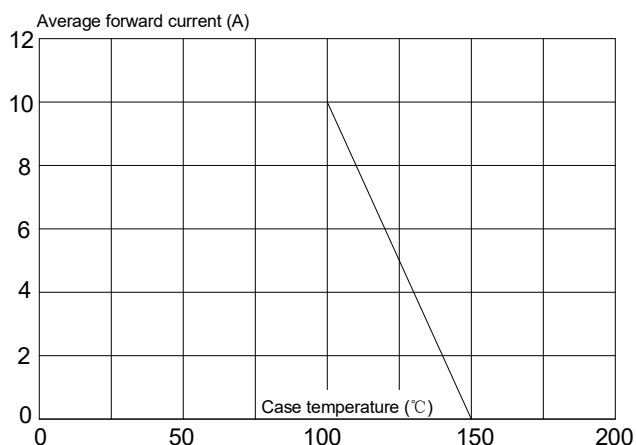


FIG.4: Forward current derating curve




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