



JEER2006BCT EPI SUPERFAST SOFT RECOVERY RECTIFIER

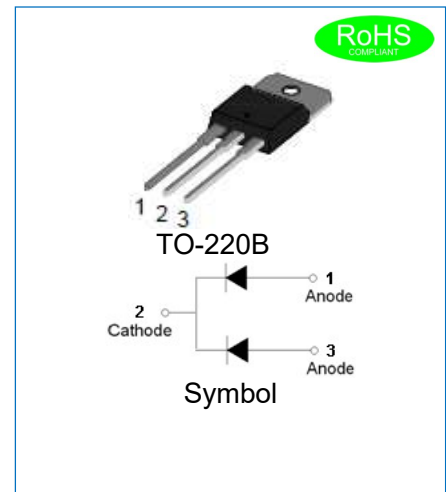
Rev.1.4

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:1.94 gram



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

Parameter	Symbol	JEER2006BCT	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 $T_{mb}=140^{\circ}C$	$I_{F(AV)}$	20	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load (per diode)	I_{FSM}	150	A
Peak forward surge current: 10ms single half sine-wave superimposed on rated load (per diode)		120	
Junction temperature and storage temperature range	T_j, T_{stg}	-55 to +150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	
Forward voltage	V_F	-	$I_F=10A, T_j=25^{\circ}C$	1.3	V	
			$I_F=10A, T_j=150^{\circ}C$	1.0		1.35
Maximum DC reverse current at rated DC blocking voltage	I_R	-	$T_j=25^{\circ}C$	-	5	μA
			$T_j=150^{\circ}C$	-	200	

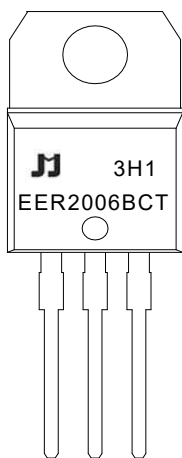
ELECTRICAL CHARACTERISTICS(Rating at 25°C case temperature unless otherwise specified.)

Parameter		Symbol	Min.	Typ.	Max.	Unit
Reverse recovery time	$I_F=0.5A, I_R=1A, I_{rr}=0.25A$	t_{rr}	-	-	35	ns
	$I_F=1A, V_R=30V, di/dt=100A/\mu s, T_j=25^\circ C$		-	30	50	
	$I_F=1A, V_R=30V, di/dt=50A/\mu s, T_j=25^\circ C$		-	40	55	

THERMAL RESISTANCES

Symbol	Parameter		Min.	Typ.	Max.	Unit
$R_{th(j-mb)}$	Thermal resistance from junction to mounting base	with heatsink compound; per diode	-	-	2.2	$^\circ C/W$
		with heatsink compound; both diodes conducting	-	-	1.6	
$R_{th(j-a)}$	Thermal resistance from junction to ambient		-	55	-	$^\circ C/W$

MARKING



EER	EPI Superfast Recovery Rectifier
20	$I_{F(AV)}=20A$
06	$V_{RRM}:600V$
B	Package:TO-220B
CT	Common cathode

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

$3\underline{x}1$:

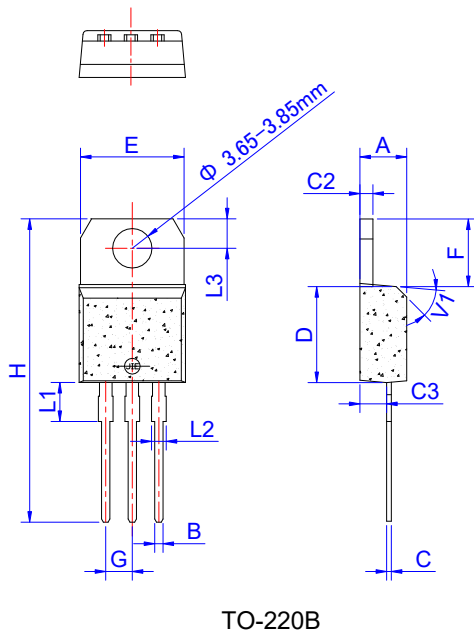
2018	2019	2020	2021	2022	2023	2024
H	I	J	K	L	M	N
2025	2026	2027	2028	2029	2030	...
O	P	Q	R	S	T	...

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

ORDERING INFORMATION

J	E	E	R	20	06	B	CT
JIEJIE Microelectronics	EPI Superfast	Superfast	Rectifier	$I_{F(AV)}=20A$	$V_{RRM}:600V$	Package:TO-220B	Common cathode

PACKAGE MECHANICAL DATA

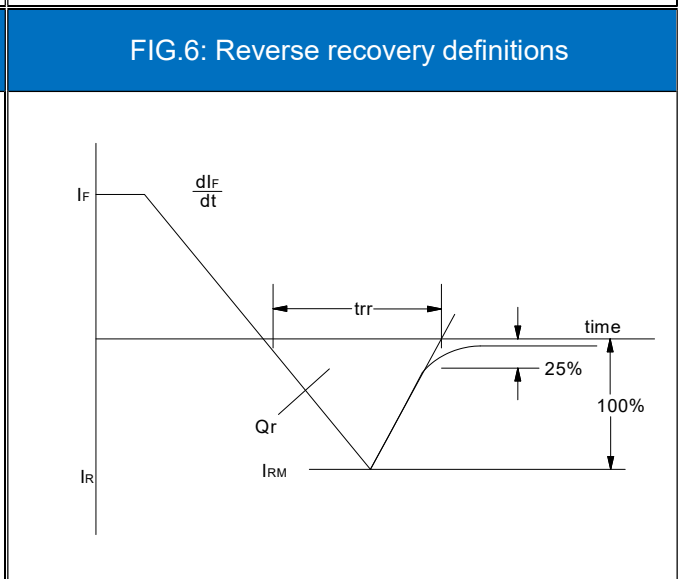
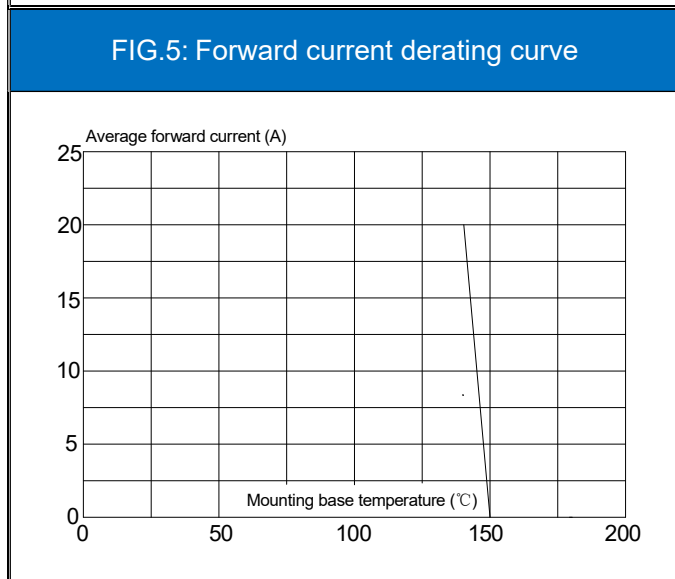
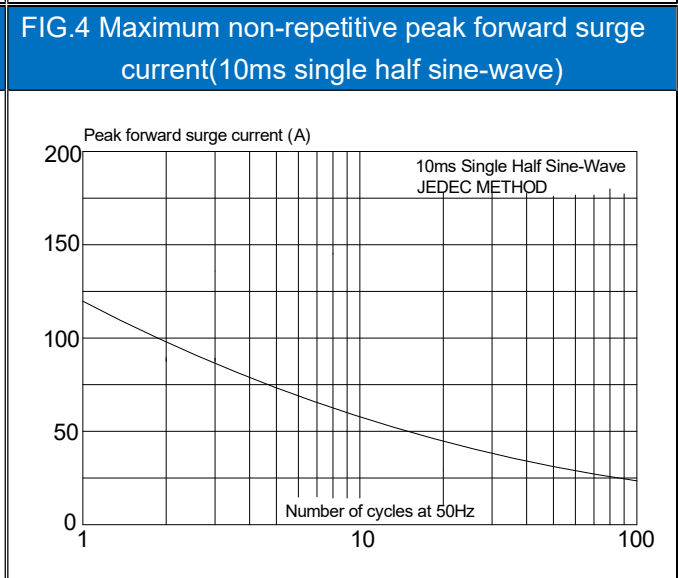
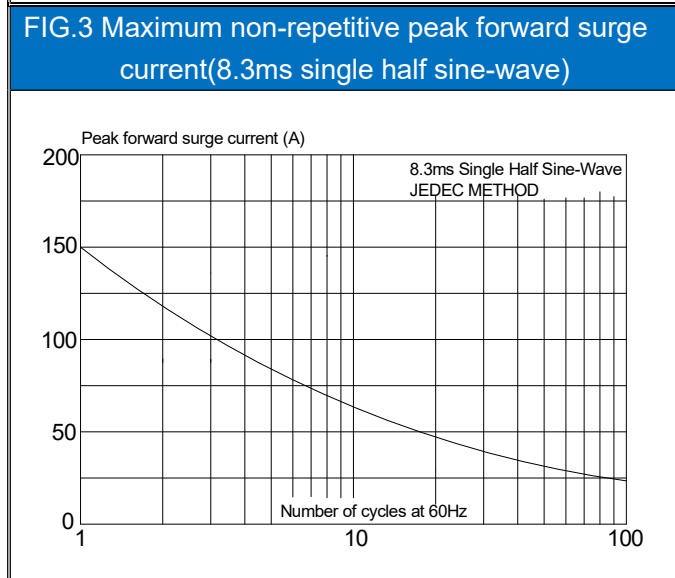
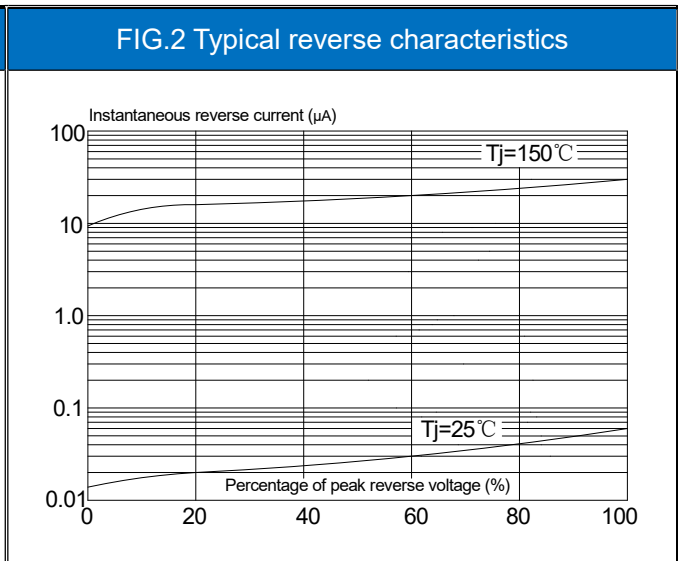
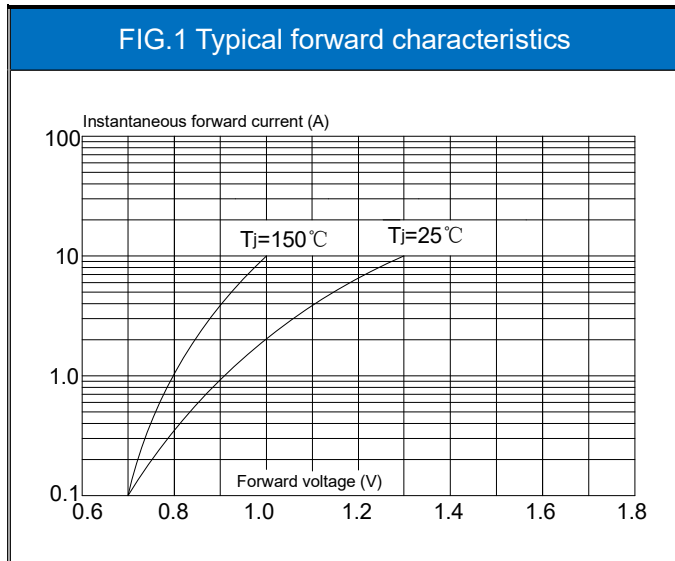


Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.60	0.173		0.181
B	0.61		0.88	0.024		0.035
C	0.46		0.70	0.018		0.028
C2	1.21		1.32	0.048		0.052
C3	2.40		2.72	0.094		0.107
D	8.60		9.70	0.339		0.382
E	9.60		10.4	0.378		0.409
F	6.20		6.60	0.244		0.260
G	2.40		2.70	0.094		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




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