



## JECR1002BCT EPI HYPERFAST RECOVERY RECTIFIER

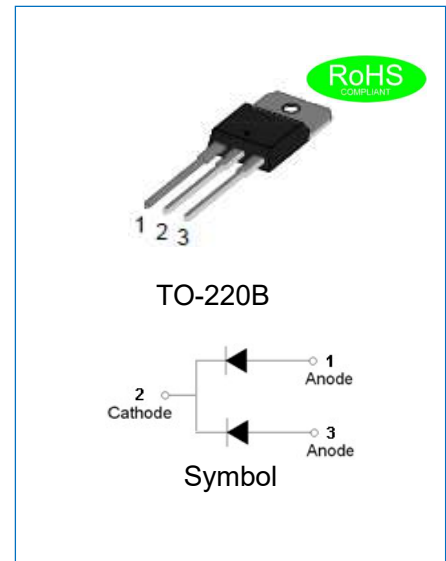
Rev.1.1

### 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
- ✧ Home appliance power supply

### 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 ambient temperature unless otherwise specified.)

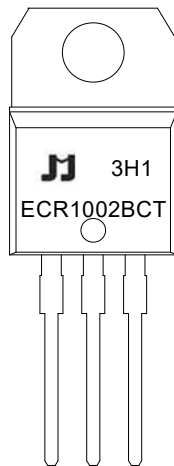
Parameter	Symbol	JECR1002BCT	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	V
Maximum RMS voltage	$V_{RMS}$	140	V
Maximum DC blocking voltage	$V_{DC}$	200	V
Maximum average forward current at $T_C=120^{\circ}C$	$I_{F(AV)}$	10	A
Peak forward surge current: 10ms single half sine-wave superimposed on rated load (per diode)	$I_{FSM}$	50	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load (per diode)	$I_{FSM}$	55	A
Junction temperature 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	$I_F=5A, T_j=25^\circ C$	$V_F$	-	-	1.1	V
	$I_F=5A, T_j=150^\circ C$		-	-	0.895	
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	$I_F=0.5A, I_R=1A, I_{RR}=0.25A$	$t_{rr}$	-	-	25	ns

**THERMAL RESISTANCES**

Symbol	Parameter	Min.	Typ.	Max.	Unit
$R_{th(j-c)}$	Thermal resistance from junction to case	-	2	-	$^\circ C/W$

**MARKING**


ECR	EPI Hyperfast Recovery Rectifier
10	$I_{F(AV)}=10A$
02	$V_{RRM}:200V$
B	Package:TO-220B
CT	Common cathode

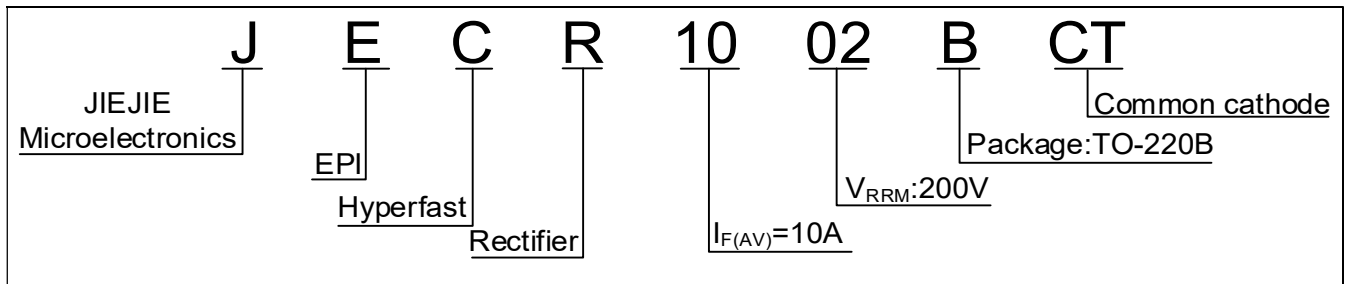
**xH1:** Month, 1、2、3 ~ 9、A、B、C

**3x1:**

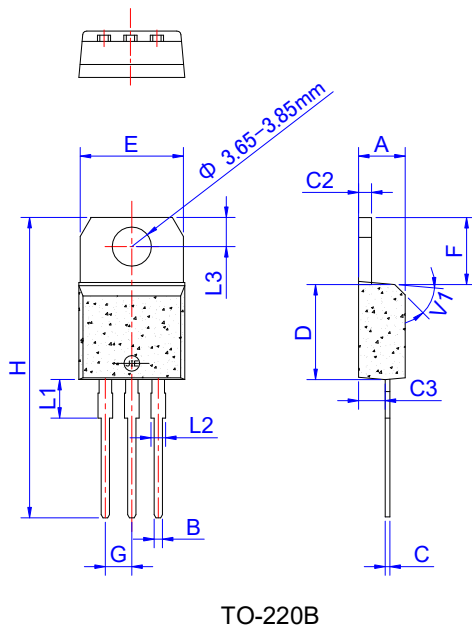
2018	2019	2020	2021	2022	2023	2024
H	I	J	K	L	M	N
2025	2026	2027	2028	2029	2030	...
O	P	Q	R	S	T	...

**3Hx:** Batch number

ORDERING INFORMATION



PACKAGE MECHANICAL DATA

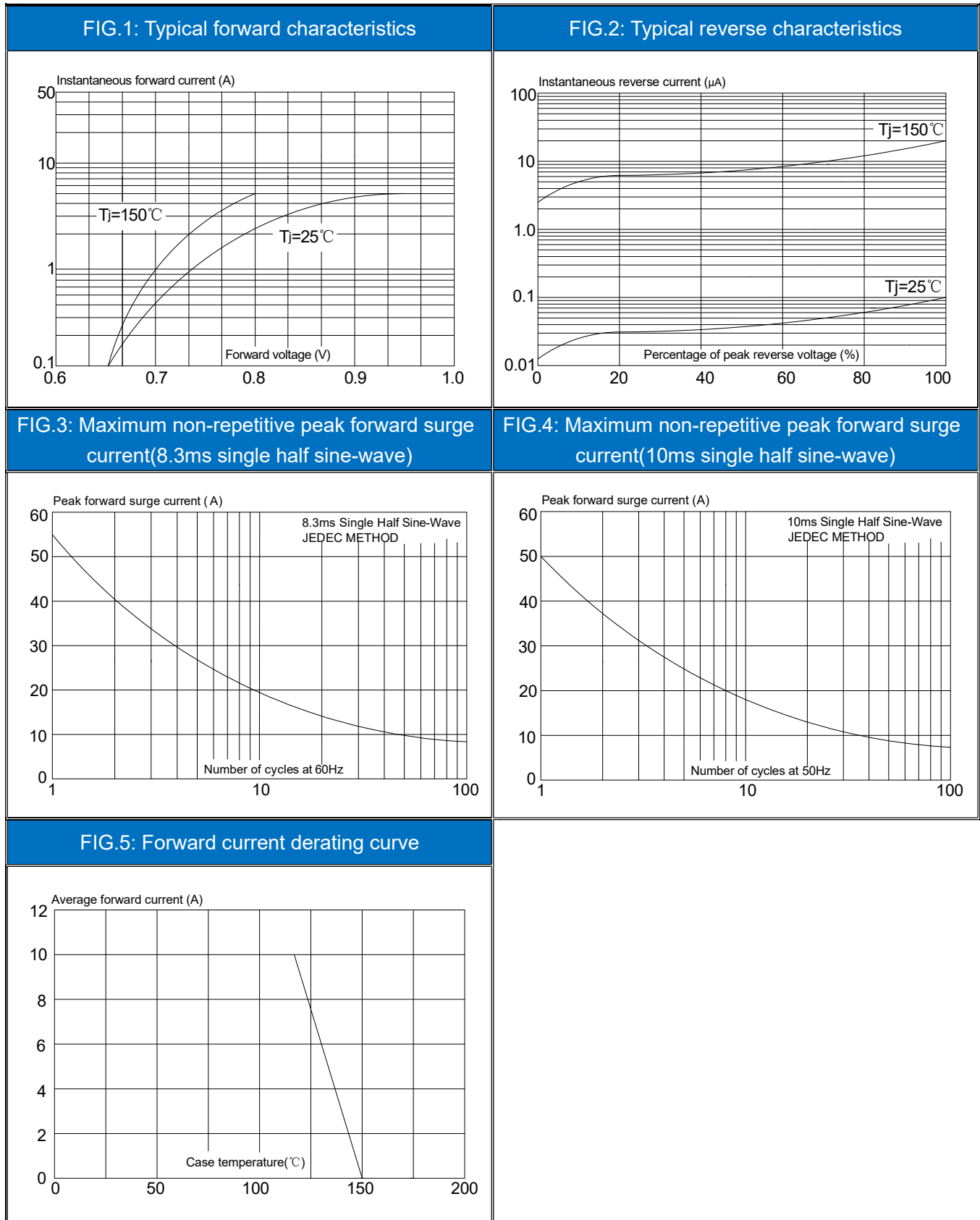


Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.60	0.173		0.181
B	0.61		0.88	0.024		0.035
C	0.46		0.70	0.018		0.028
C2	1.21		1.32	0.048		0.052
C3	2.40		2.72	0.094		0.107
D	8.60		9.70	0.339		0.382
E	9.60		10.4	0.378		0.409
F	6.20		6.60	0.244		0.260
G	2.40		2.70	0.094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