# JIEJIE MICROELECTRONICS CO., LTD.

# JEER2004BCT EPI SUPERFAST RECOVERY RECTIFIER

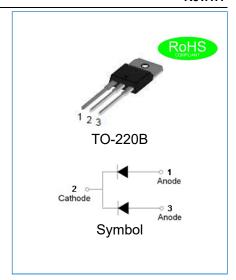
Rev.1.1

#### **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
- ♦ 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℃ case temperature unless otherwise specified.)

Parameter	Symbol	JEER2004BCT	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	400	٧
Maximum RMS voltage	VRMS	280	٧
Maximum DC blocking voltage	V <sub>DC</sub>	400	٧
Maximum average forward current at T <sub>C</sub> =100℃	I <sub>F(AV)</sub>	20	Α
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load(per diode)	I <sub>FSM</sub>	150	А
Junction temperature and storage temperature range	$T_j, T_{stg}$	-55 to +150	$^{\circ}$

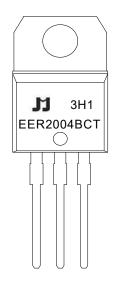
# **ELECTRICAL CHARACTERISTICS**(Rating at 25°C case temperature unless otherwise specified.)

Parame	Symbol	Min.	Тур.	Max.	Unit	
Forward voltage I <sub>F</sub> =10A,T <sub>j</sub> =25°C		V <sub>F</sub>	-	-	1.3	<b>V</b>
Maximum DC reverse current	<b>T</b> j= <b>25</b> ℃	1	-	-	5	μΑ
at rated DC blocking voltage	T <sub>j</sub> =150℃	l <sub>R</sub>	-	-	200	
Reverse recovery time	I <sub>F</sub> =0.5A,I <sub>R</sub> =1A,I <sub>rr</sub> =0.25A	t <sub>rr</sub>	-	-	35	ns

#### THERMAL RESISTANCES

Symbol	Parameter	Min.	Тур.	Max.	Unit
R <sub>th(j-c)</sub>	Thermal resistance from junction to case		-	3.0	°CW

# **MARKING**



EER	EPI Superfast Recovery Rectifier
20	I <sub>F(AV)</sub> =20A
04	V <sub>RRM</sub> : 400V
В	Package: TO-220B
СТ	Common cathode

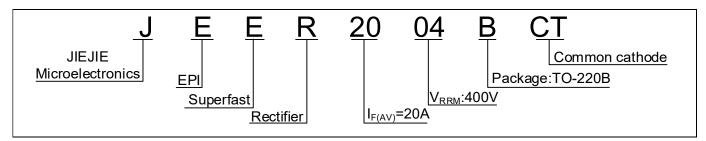
 $\underline{\mathbf{x}}$ H1: Month, 1, 2, 3  $\sim$  9, A, B, C

3<u>x</u>1:

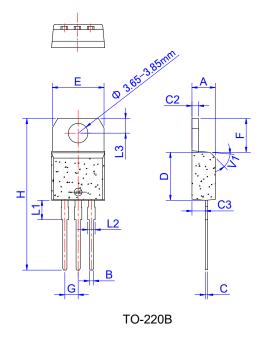
2018	2019	2020	2021	2022	2023	2024
Н	I	J	K	L	М	Ν
2025	2026	2027	2028	2029	2030	
0	Р	Q	R	S	Т	

3Hx: Batch number

# **ORDERING INFORMATION**



# PACKAGE MECHANICAL DATA

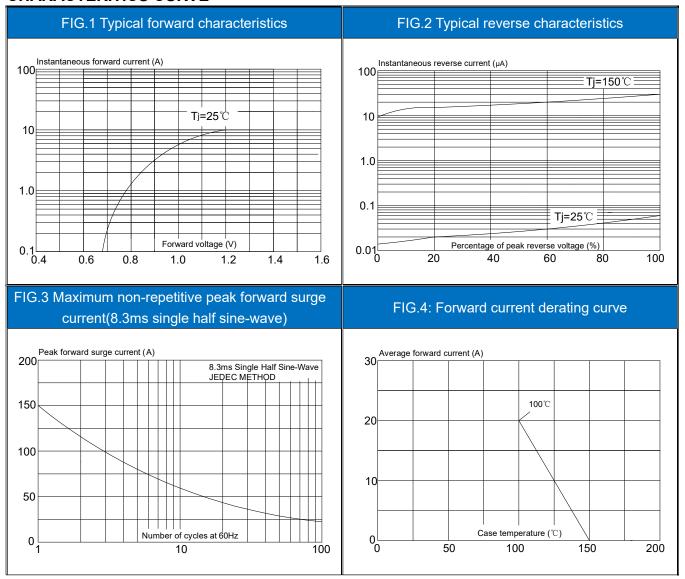


	Dimensions					
Ref.		Millimete	rs Inches			
	Min.	Тур.	Max.	Min.	Тур.	Max.
Α	4.40		4.60	0.173		0.181
В	0.61		0.88	0.024		0.035
С	0.46		0.70	0.018		0.028
C2	1.21		1.32	0.048		0.052
C3	2.40		2.72	0.094		0.107
D	8.60		9.70	0.339		0.382
Е	9.60		10.4	0.378		0.409
F	6.20		6.60	0.244		0.260
G	2.40		2.70	0.094		0.106
Н	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	TUBE	PER CARTON
	(g/PCS) typ.	(PCS)	(PCS)
TUBE	1.94	50	5,000

# **CHARACTERITICS CURVE**





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