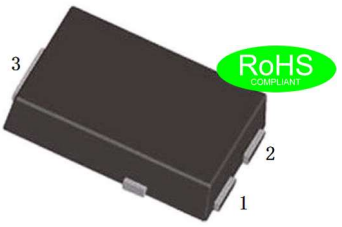
JEUR0506V

EPI SUPERFAST SOFT RECOVERY RECTIFIER

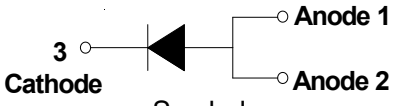
Rev.1.1

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



TO-277B



Symbol

MECHANICAL DATA

- ✧ Case: TO-277B molded plastic over passivated junction
- ✧ Terminals: Solder plated, solderable per J-STD-002

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

Parameter	Symbol	JEUR0506V	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 rectified current at T_L=90℃	$I_{F(AV)}$	5	A
Peak forward surge current:8.3ms single half sine-wave superimposed on rated load	I_{FSM}	110	A
Junction temperature and storage temperature range	T_j,T_{stg}	-55 to +150	℃

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

Parameter		Symbol	Min.	Typ.	Max.	Unit
Forward voltage	I_F=5A,T_j=25℃	V_F	-	1.2	1.5	V
	I_F=5A,T_j=150℃		-	-	1.2	
Maximum DC reverse current at rated DC blocking voltage	T_j=25℃	I_R	-	-	5	μA
	T_j=150℃		-	-	200	
Maximum reverse recovery time	I_F=0.5A,I_R=1A, I_{rr}=0.25A	t_{rr}	-	-	50	ns

THERMAL RESISTANCES

Symbol	Parameter	Min.	Typ.	Max.	Unit
$R_{th(j-a)}$	Thermal resistance from junction to ambient	-	65	-	℃/W

MARKING

EUR	EPI Ultrafast Recovery Rectifier
05	$I_{F(AV)}$=5A
06	V_{RRM}:600V
V	Package:TO-277B

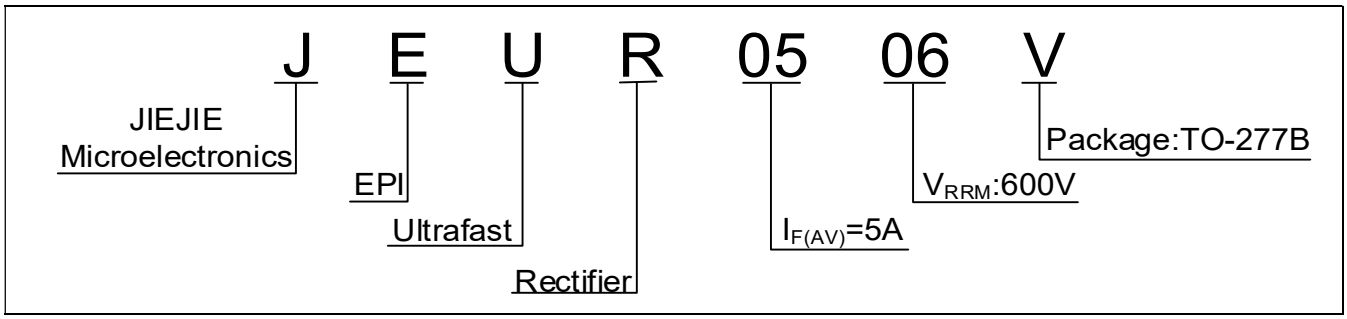
xH1：Month，1、2、3 ～ 9、A、B、C

3**x**1：

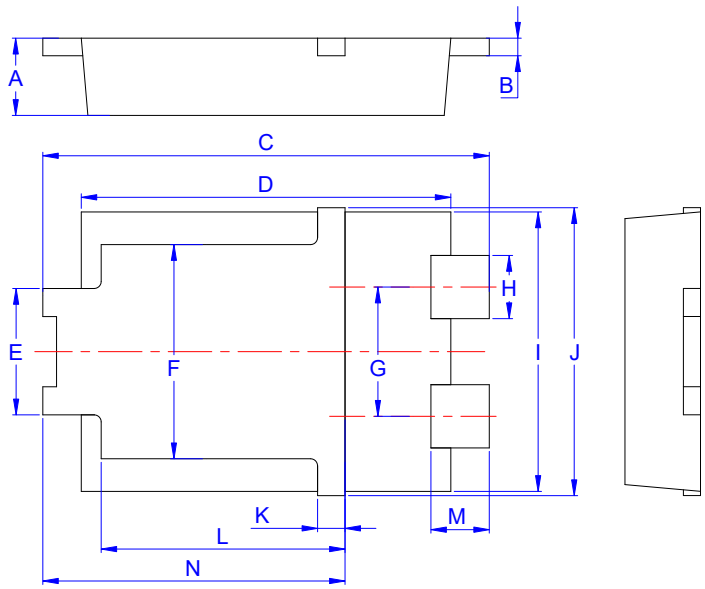
2018	2019	2020	2021	2022	2023	2024
H	I	J	K	L	M	N
2025	2026	2027	2028	2029	2030	…
O	P	Q	R	S	T	…

3H**x**：Batch number

ORDERING INFORMATION



PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	0.95	1.10	1.25	0.037	0.043	0.049
B	0.20	0.25	0.30	0.008	0.010	0.012
C	6.30	6.50	6.70	0.248	0.256	0.264
D	5.28	5.38	5.48	0.208	0.212	0.216
E	1.70	1.80	1.90	0.067	0.071	0.075
F	2.90	3.05	3.20	0.114	0.120	0.126
G	1.74	1.84	1.94	0.069	0.072	0.076
H	0.85	0.90	0.95	0.033	0.035	0.037
I	3.88	3.98	4.08	0.153	0.157	0.161
J			4.50			0.177
K	0.25	0.40	0.55	0.010	0.016	0.022
L	3.40	3.55	3.70	0.134	0.140	0.146
M	0.65	0.85	1.05	0.026	0.033	0.041
N	4.20	4.40	4.60	0.165	0.173	0.181

PACKAGE INFORMATION-TO-277B

PART No.	REEL (PCS)	PER CARTON (PCS)	DESCRIPTION
JEUR0506V	5,000	80,000	13 inch reel pack

CHARACTERITICS CURVE

FIG.1: Typical forward characteristics

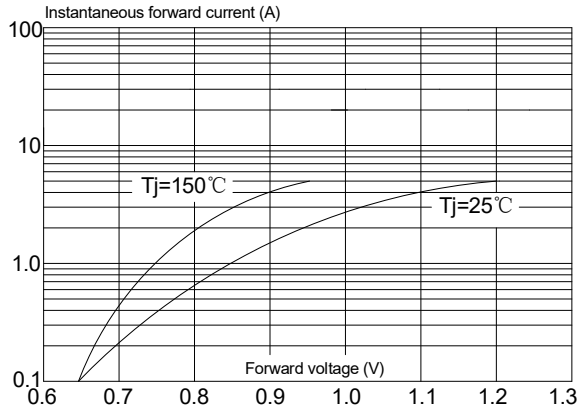


FIG.2: Typical reverse characteristics

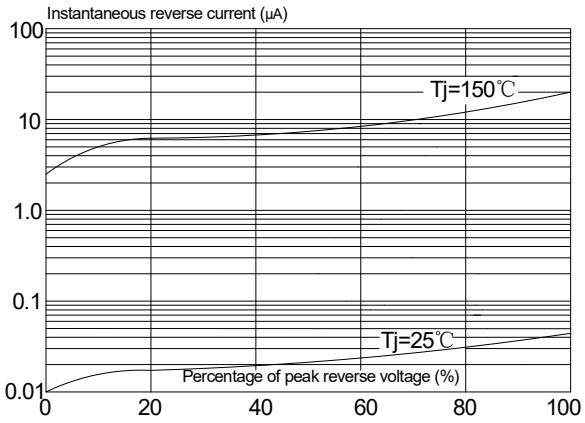


FIG.3: Maximum non-repetitive peak forward surge current

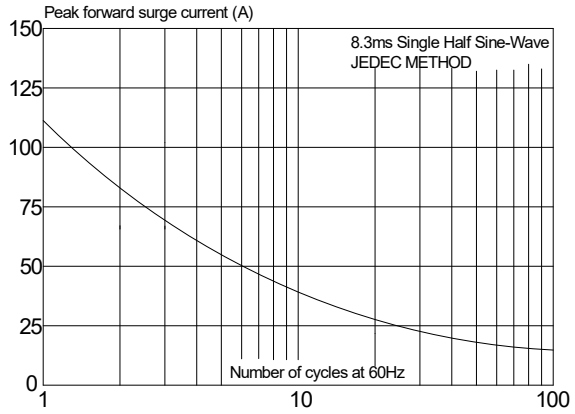
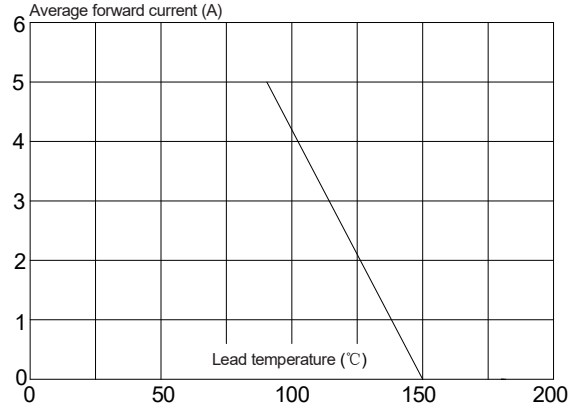


FIG.4:Forward current derating curve



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