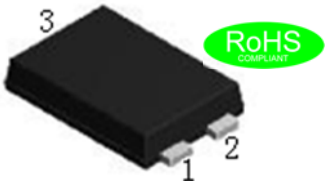
JEUR0506V

EPI SUPERFAST SOFT RECOVERY RECTIFIER

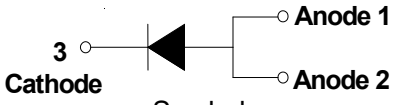
Rev.2.0

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 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	
Reverse current	V_R=600V,T_j=25℃	I_R	-	-	5	μA
	V_R=600V,T_j=150℃		-	-	200	
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

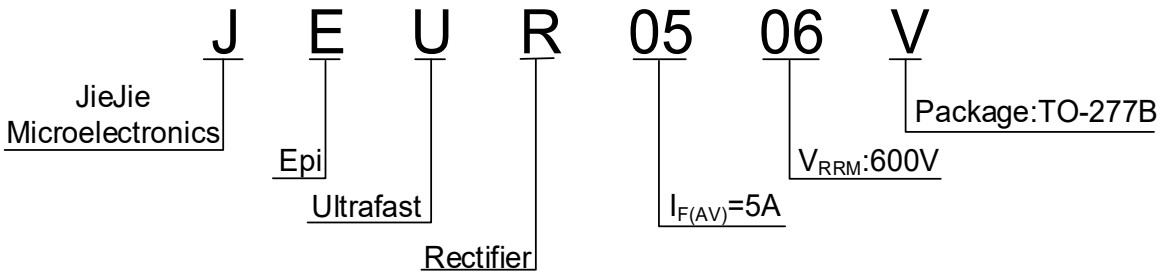
xH1：Month，1、2、3 ～ 9、A、B、C

3**x**1：

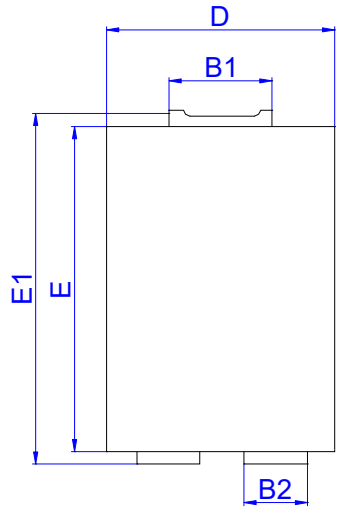
2018	2019	2020	2021	2022	2023	2024
H	I	J	K	L	M	N
2025	2026	2027	2028	2029	2030	…
O	P	Q	R	S	T	…

3H**x**：Batch number

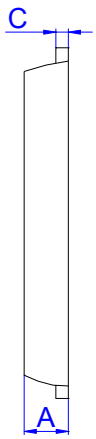
ORDERING INFORMATION



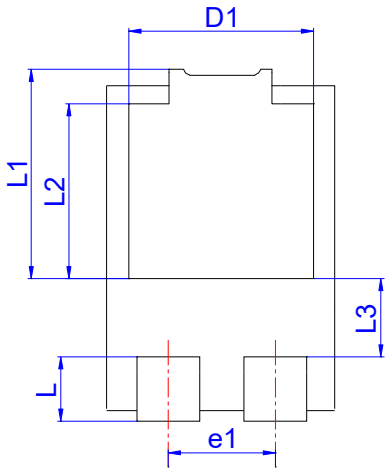
PACKAGE MECHANICAL DATA



Top view



Side view



Bottom view

Symbol	Millimeters		Inches	
	Min	Max	Min	Max
E1	6.40	6.60	0.252	0.260
E	5.60	5.80	0.220	0.228
D	4.10	4.30	0.161	0.169
B1	1.70	1.90	0.067	0.075
B2	0.80	1.00	0.031	0.039
A	1.05	1.20	0.041	0.047
C	0.30	0.40	0.012	0.016
L	0.85	1.10	0.033	0.043
L1	4.20	4.40	0.165	0.173
L2	3.52Typ.		0.139Typ.	
L3	1.10	1.40	0.043	0.055
D1	3.00	3.30	0.118	0.130
e1	1.86Typ.		0.073Typ.	

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

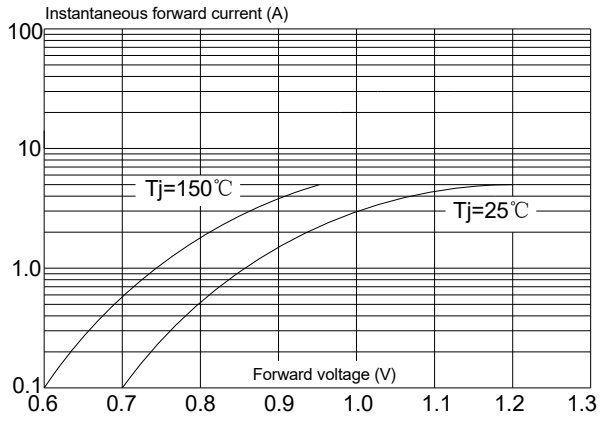


FIG.2: Typical reverse characteristics

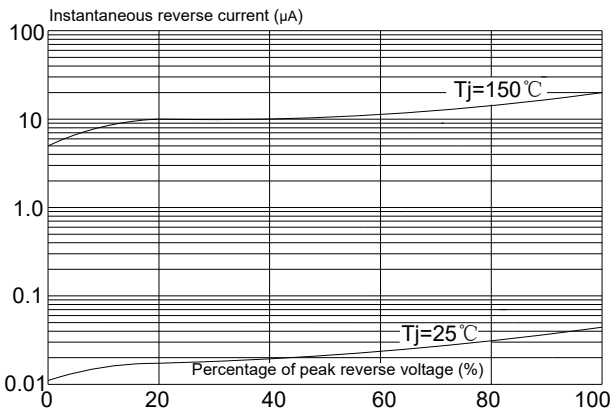


FIG.3: Maximum non-repetitive peak forward surge current

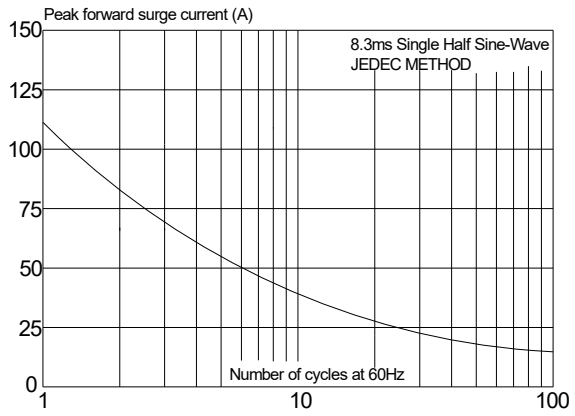
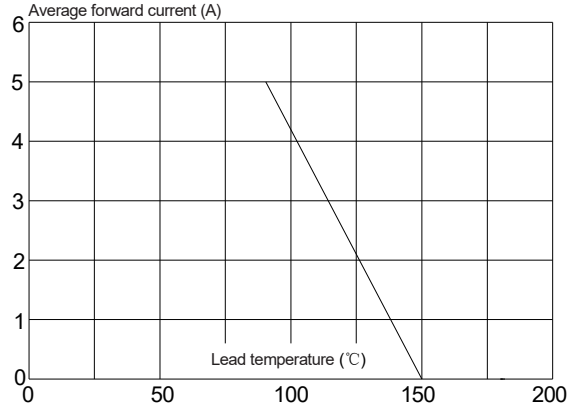


FIG.4:Forward current derating curve



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