



JEUR0406G2

EPI ULTRA FAST SOFT RECOVERY RECTIFIER

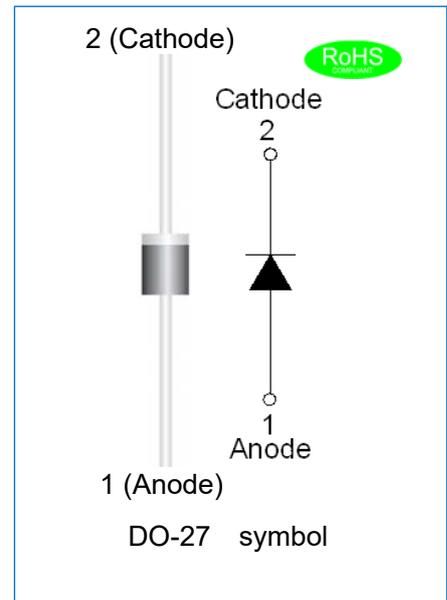
Rev.1.4

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
- ✧ Ultra Fast recovery time and soft recovery characteristics
- ✧ Low recovery loss
- ✧ Applications for use in switching power supplies, inverters and as free wheeling diodes

MECHANICAL DATA

- ✧ Case: DO-27 molded plastic
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Polarity: Color band denotes cathode end



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

Parameter	Symbol	JEUR0406G2	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 current at $T_A=40^\circ\text{C}$	$I_{F(AV)}$	4	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	°C

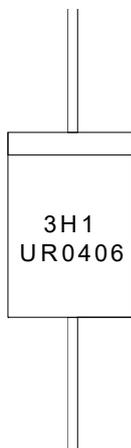
ELECTRICAL CHARACTERISTICS(Rating at 25°C ambient temperature unless otherwise specified.)

Parameter		Symbol	Min.	Typ.	Max.	Unit
Forward voltage	$I_F=3A, T_j=150^\circ C$	V_F	-	-	1.05	V
	$I_F=3A, T_j=25^\circ C$		-	-	1.25	
	$I_F=4A, T_j=25^\circ C$		-	-	1.28	
Reverse current	$V_R=600V, T_j=25^\circ C$	I_R	-	-	5	μA
	$V_R=600V, T_j=150^\circ C$		-	-	200	
Reverse recovery time	$I_F=0.5A, I_R=1A,$ $I_{REC}=0.25A$	t_{rr}	-	-	50	ns
	$I_F=1A, di/dt=50A/\mu s$		-	-	75	
Peak reverse recovery current	$I_F=1A, di/dt=50A/\mu s$	I_{RM}	-	1.7	-	A

THERMAL RESISTANCES

Symbol	Parameter	Min.	Typ.	Max.	Unit
$R_{th(j-a)}$	Thermal resistance from junction to ambient free air	-	28	-	$^\circ C/W$

MARKING



UR	Ultra Fast Recovery Rectifier
04	$I_{F(AV)}=4A$
06	$V_{RRM}:600V$

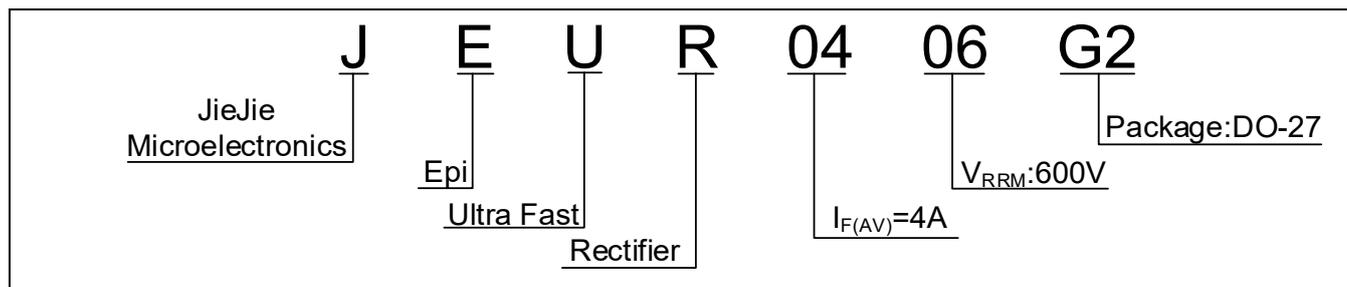
$\underline{x}H1$: Month, 1/2/3~9/A/B/C

$3\underline{x}1$:

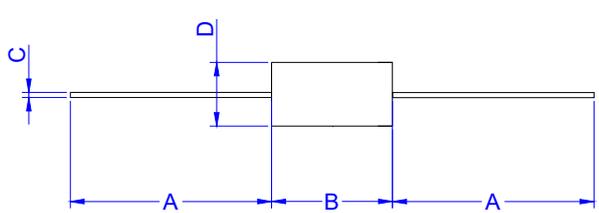
2018	2019	2020	2021	2022	2023	2024
H	I	J	K	L	M	N
2025	2026	2027	2028	2029	2030	...
O	P	Q	R	S	T	...

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

ORDERING INFORMATION



PACKAGE MECHANICAL DATA

 <p style="text-align: center;">DO-27</p>	Ref.	Dimensions			
		Millimeters		Inches	
		Min.	Max.	Min.	Max.
	A	24.00	-	0.945	-
	B	8.50	9.50	0.335	0.375
C	1.15	1.45	0.045	0.057	
D	4.90	5.50	0.193	0.217	

PACKAGE INFORMATION-DO-27

OUTLINE	UNIT WEIGHT (g/PCS) TYP	INNER BOX (PCS)	PER CARTON (PCS)
Bulk	1.142	1,000	10,000

CHARACTERISTICS CURVE

FIG.1: Typical forward characteristics

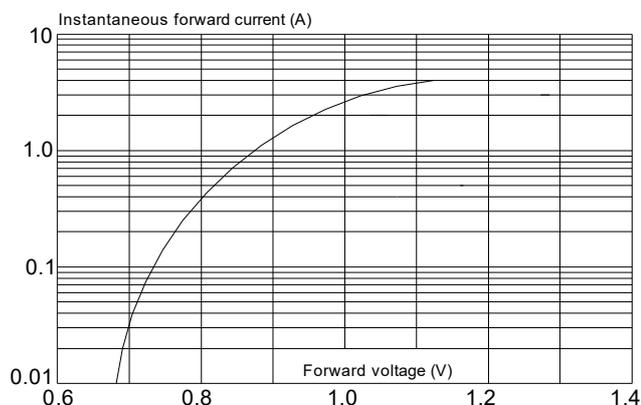


FIG.2: Typical reverse characteristics

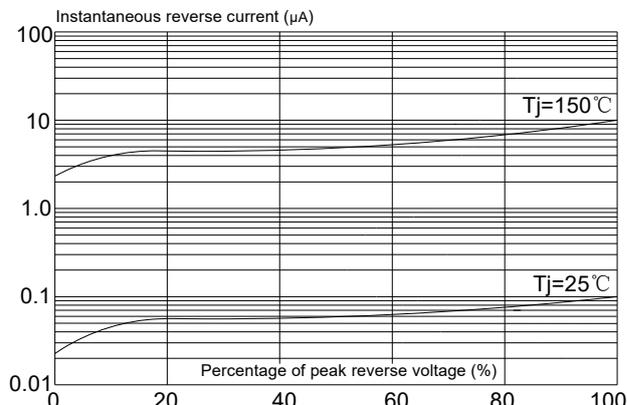


FIG.3: Maximum non-repetitive peak forward surge current

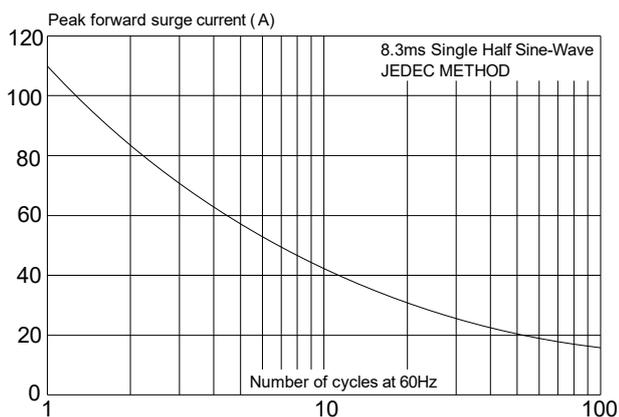


FIG.4: Forward current derating curve

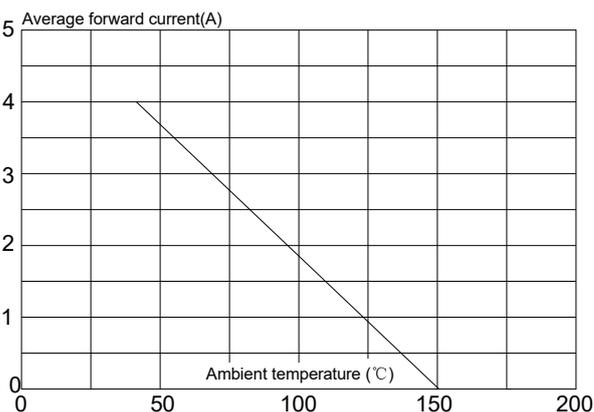


FIG.5: Power dissipation

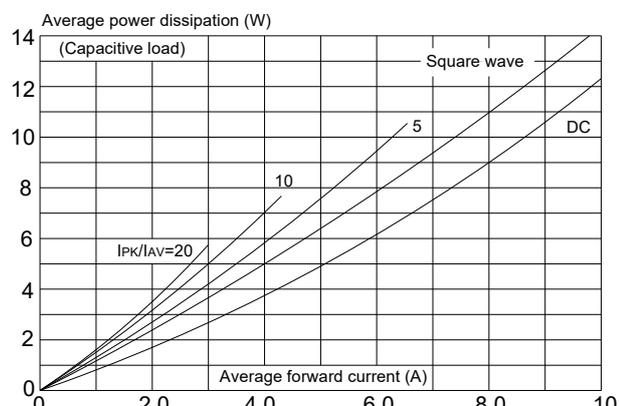
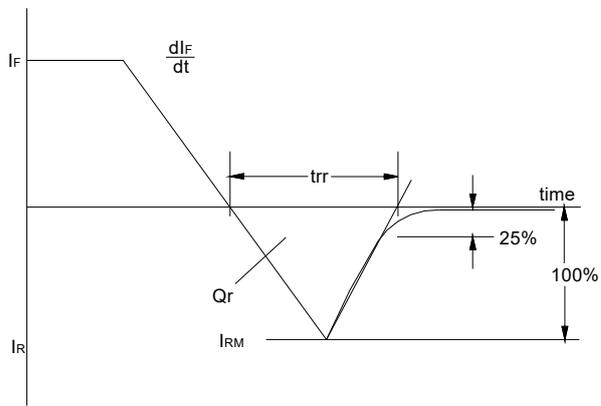


FIG.6: Reverse recovery definitions



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