

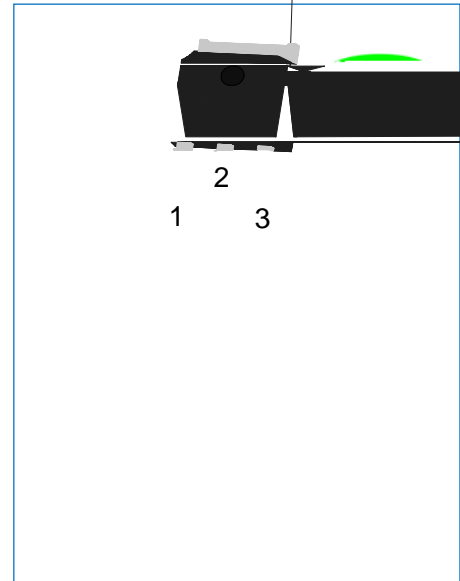


JPUR0512K
EPI PLANAR ULTRAFAST SOFT RECOVERY RECTIFIER

Rev.1.6

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 high speed switching
- Epitaxial planar technology
- 5th Generation soft fast recovery characteristics



MECHANICAL DATA

- Case: TO-252 molded plastic
- Terminals: Solder plated, solderable per J-STD-002
- Weight: 0.329 gram

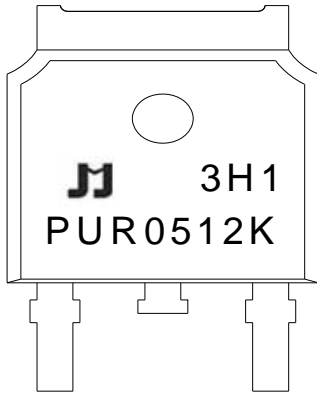
ABSOLUTE MAXIMUM RATING (Rating at 25 ambient temperature unless otherwise specified.)

Parameter	Symbol	JPUR0512K	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1200	V
Maximum DC blocking voltage	V_{DC}	1200	V
Average forward current at $T_{mb}=144$	$I_{F(AV)}$	5	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	60	A
Peak forward surge current: 10ms single half sine-wave superimposed on rated load	I_{FSM}	55	A
Junction temperature and storage temperature range	T_j, T_{stg}	-55 to +175	

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

Parameter		Symbol	Min.	Typ.	Max.	Unit
Forward voltage	$I_F=5A, T_j=25$	V_F	-	1.8	2.2	V
	$I_F=5A, T_j=150$		-	1.4	-	
Reverse current	$V_R=1200V, T_j=25$	I_R	-	-	5	μA
	$V_R=1200V, T_j=150$		-	-	200	
Reverse recovery time	$I_F=1A, V_R=30V,$ $di/dt=100A/\mu s, T_j=25$	t_{rr}	-	-	50	ns
	$I_F=5A, V_R=400V,$ $di/dt=500A/\mu s, T_j=25$		-	35	-	
	$I_F=5A, V_R=400V,$ $di/dt=500A/\mu s, T_j=125$		-	75	-	

MARKING



PUR	Planar Ultrafast Recovery Rectifier
05	$I_{F(AV)}=5A$
12	$V_{RRM}:1200V$
K	Package:TO-252

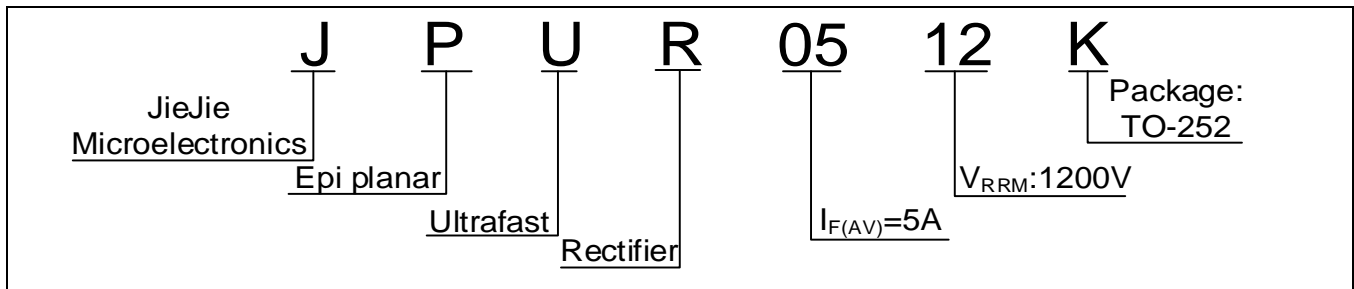
xH1: Month, 1/2/3~9/A/B/C

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



CHARACTERISTICS CURVE

FIG.1 Typical forward characteristics

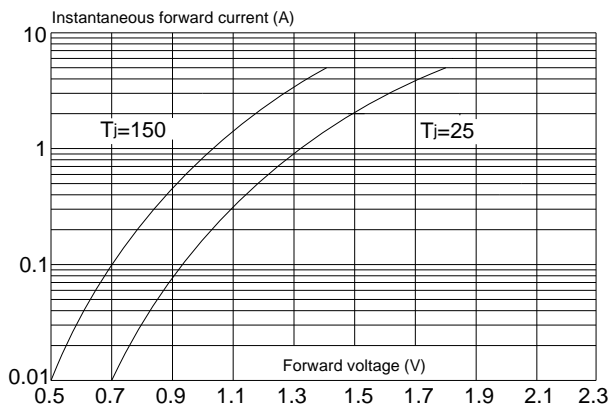
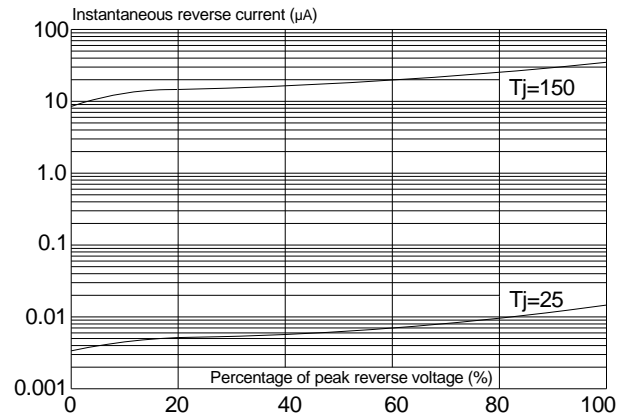


FIG.2 Typical reverse characteristics



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