



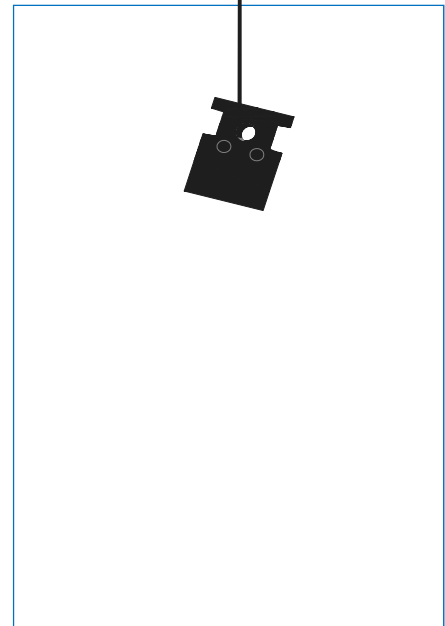
JPCR3006SCT

EPI PLANAR HYPERFAST 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
- ✧ Hyperfast recovery time
- ✧ Epitaxial planar technology
- ✧ 5th Generation soft fast recovery characteristics
- ✧ Low recovery loss



MECHANICAL DATA

- ✧ Case: TO-247J molded plastic over passivated junction
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Weight:6 gram

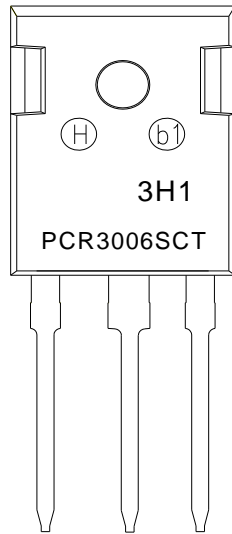
ABSOLUTE MAXIMUM RATING (Rating at 25 ambient temperature unless otherwise specified.)

Parameter	Symbol	JPCR3006SCT	Unit
Maximum repetitive peak reverse voltage (Pin1~2 or Pin3~2)	V_{RRM}	600	V
Maximum DC blocking voltage(Pin1~2 or Pin3~2)	V_{DC}	600	V
Average forward current at $T_C=130$ (Pin1,3~2)	$I_{F(AV)}$	30	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load(Pin1~2 or Pin3~2)	I_{FSM}	165	A
Peak forward surge current: 10ms single half sine-wave superimposed on rated load(Pin1~2 or Pin3~2)		150	
Junction temperature and storage temperature range	T_j, T_{stg}	-55 to +175	

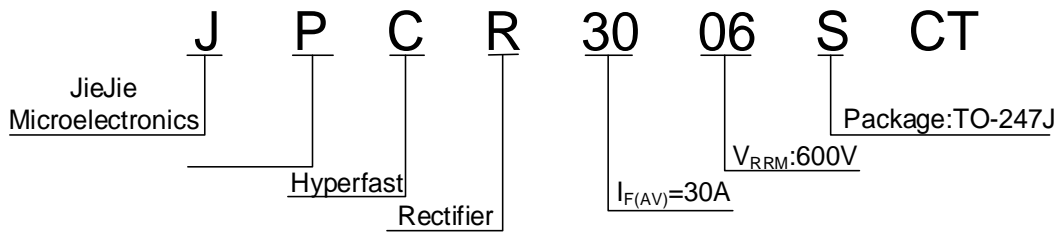
ELECTRICAL CHARACTERISTICS(Rating at 25 ambient temperature unless otherwise specified.)

Parameter		Symbol	Min.	Typ.	Max.	Unit
Forward voltage (Pin1~2 or Pin3~2)	$I_F=15A, T_j=25$	V_F	-	2	2.5	V
	$I_F=15A, T_j=150$		-	1.35	-	V
Reverse current (Pin1~2 or Pin3~2)	$V_R=600V, T_j=25$	I_R				

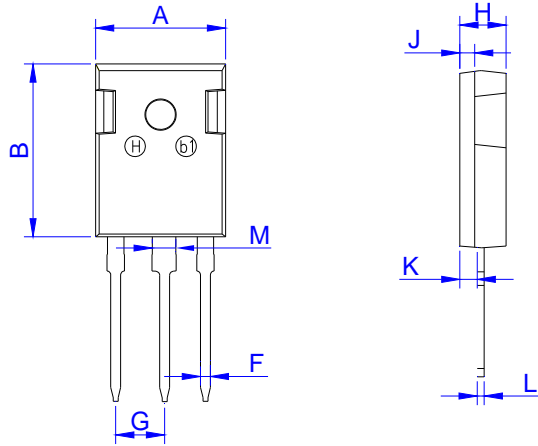
MARKING



ORDERING INFORMATION



PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	15.50	15.80	16.10	0.610	0.622	0.634
B	20.80	21.00	21.20	0.819	0.827	0.835
C	19.70	20.00	20.30	0.776	0.787	0.799
D	1.80	2.00	2.20	0.071	0.079	0.087
E	1.90	2.10	2.30	0.075	0.083	0.091
F	1.00	1.20	1.40	0.039	0.047	0.055
G	5.25		5.65	0.207		0.222
H	4.80	5.00	5.20	0.189	0.197	0.205
J	1.90	2.00	2.10	0.075	0.079	0.083
K	2.20	2.35	2.50	0.087	0.093	0.098
L	0.41	0.60	0.79	0.016	0.024	0.031

CHARACTERISTICS CURVE

FIG.1 Typical forward characteristics
(Pin1~2 or Pin3~2)

FIG.2 Typical reverse characteristics
(Pin1~2 or Pin3~2)

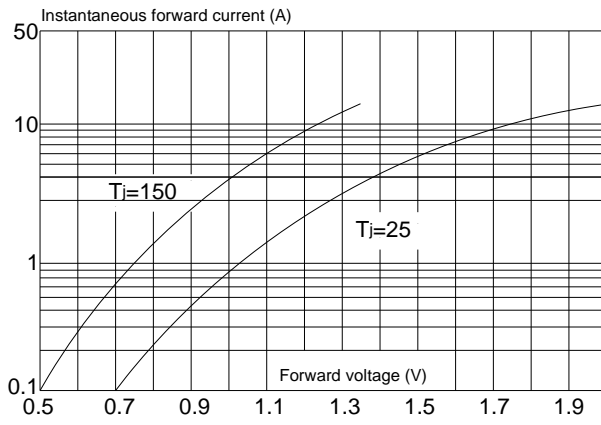


FIG.5: Forward current derating curve
(Pin1,3~2)

FIG.6: Reverse recovery definitions

