



GP4012SL~GP4016SL GENERAL PURPOSE RECTIFIER

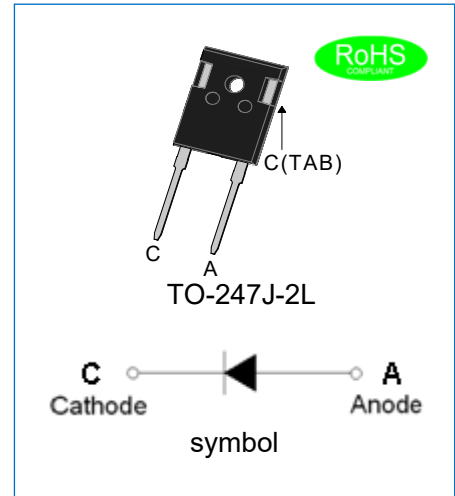
Rev.3.2

DESCRIPTION

- ✧ Plastic package has underwriters laboratories flammability classification 94V-0
- ✧ Glass passivated chip junction
- ✧ Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- ✧ Case: TO-247J-2L, molded plastic over passivated junction
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Polarity: Pin C denotes cathode end
- ✧ Weight: 5.682 gram



ABSOLUTE MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

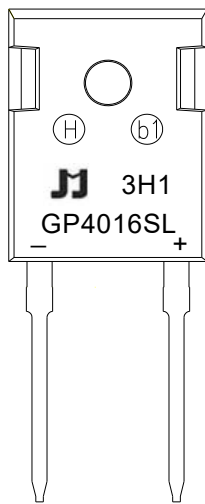
(Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	GP4012SL	GP4016SL	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1200	1600	V
Maximum RMS voltage	V_{RMS}	840	1120	V
Maximum DC blocking voltage	V_{DC}	1200	1600	V
Average forward current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	40		A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	500	600	A
Maximum forward voltage @ $I_F=40\text{A}$	V_F	1.2		V
Maximum DC reverse current at rated DC blocking voltage	$T_j=25^\circ\text{C}$	10		μA
	$T_j=150^\circ\text{C}$	1.0	1.5	mA
Typical junction capacitance $V_R=4.0\text{V}$, $f=1\text{MHz}$	C_J	240		pF
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150		$^\circ\text{C}$

THERMAL RESISTANCES

Symbol	Parameter	GP4012SL	GP4016SL	Unit
$R_{th(j-c)}$	Junction to case	0.4		$^{\circ}C/W$

MARKING



G	General Purpose Rectifier
P	Pin
40	$I_{F(AV)}=40A$
16	$V_{RRM}:1600V$
SL	TO-247J-2L

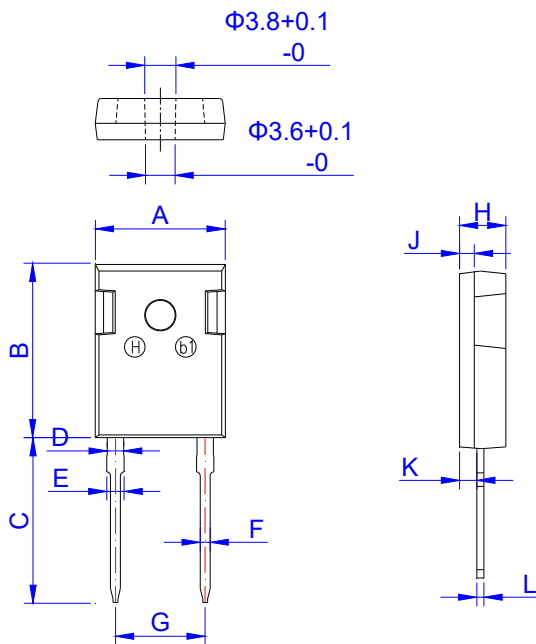
$\underline{x}H1$: Month, 1/2/3~9/A/B/C

$3\underline{x}1$:

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

PACKAGE MECHANICAL DATA



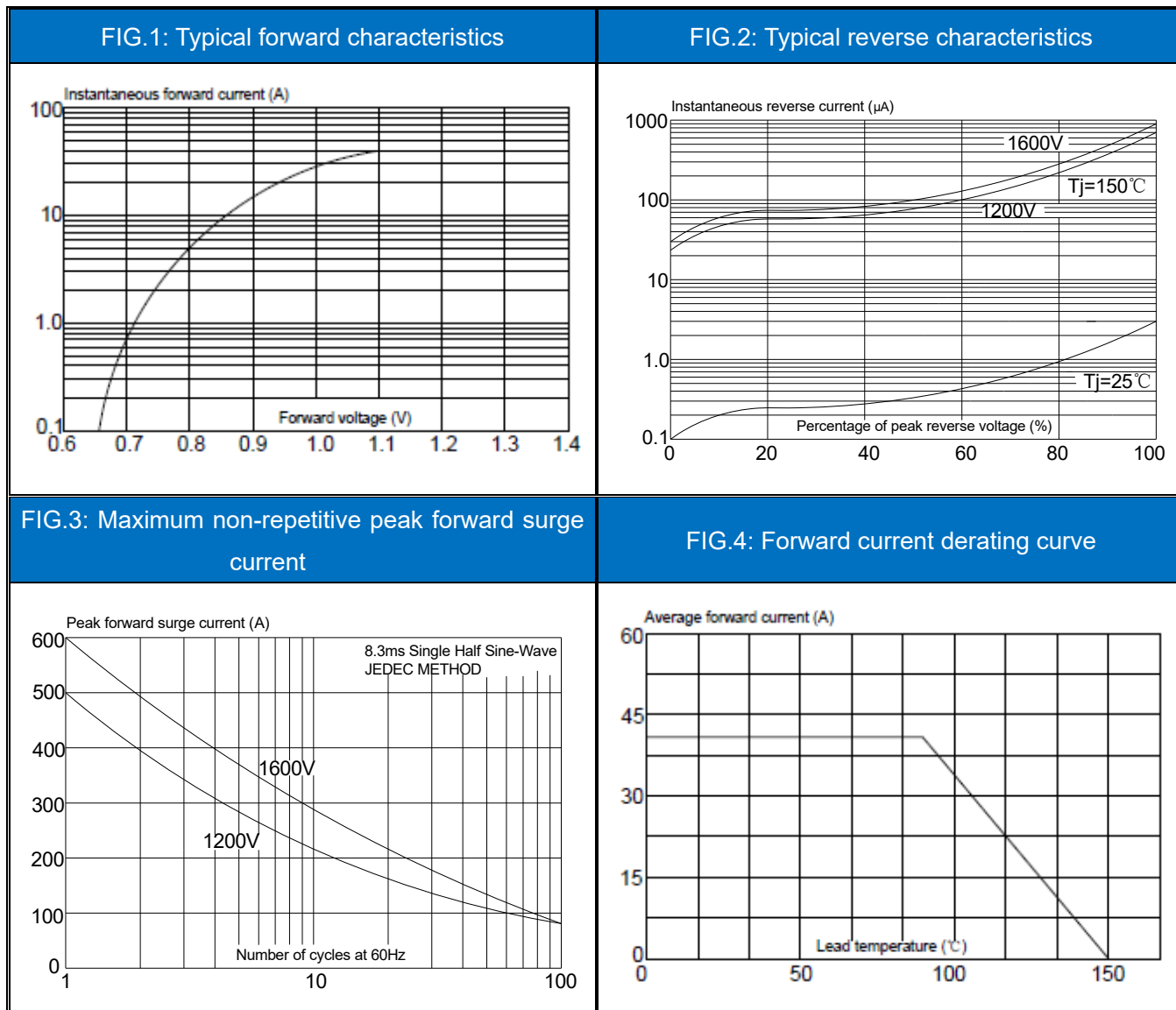
TO-247J-2L

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	10.50		11.30	0.413		0.445
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

PACKAGE INFORMATION-TO-247J-2L

OUTLINE	UNIT WEIGHT (g/PCS) TYP	TUBE (PCS)	PER CARTON (PCS)
TUBE	5.682	30	2,250

CHARACTERISTICS CURVE




JieJie products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable JieJie product documentation. Warranties granted by JieJie shall be deemed void for products used for any purpose not expressly set forth in applicable JieJie documentation. JieJie shall not be liable for any claims or damages arising out of products used in applications not expressly intended by JieJie as set forth in applicable JieJie documentation. The sale and use of JieJie products is subject to JieJie terms and conditions of sale, unless otherwise agreed by JieJie.

Information furnished in this document is believed to be accurate and reliable. However, Jiangsu JieJie Microelectronics Co., Ltd. assumes no responsibility for the consequences of use without consideration for such information nor use beyond it.

Information mentioned in this document is subject to change without notice, apart from that when an agreement is signed, Jiangsu JieJie complies with the agreement.

Products and information provided in this document have no infringement of patents. Jiangsu JieJie assumes no responsibility for any infringement of other rights of third parties which may result from the use of such products and information.

This document is the 3.2nd version which is made in 13-Dec.-2023. This document supersedes and replaces all information previously supplied.

 is a registered trademark of Jiangsu JieJie Microelectronics Co., Ltd.

Copyright ©2023 Jiangsu JieJie Microelectronics Co., Ltd. Printed All rights reserved.