

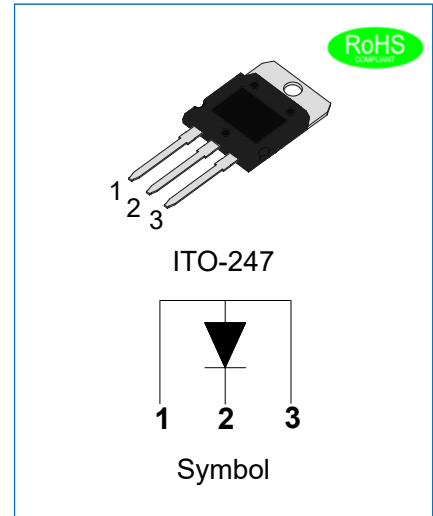


## GP9016IS ~GP9020IS GENERAL PURPOSE RECTIFIER

Rev.1.1

### 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: ITO-247, molded plastic over passivated junction
- ◇ Terminals: Solder plated, solderable per J-STD-002
- ◇ Internally constructed isolated package is offered for ease of heat sinking with highest isolation voltage
- ◇ Weight: 10.2 gram

### ABSOLUTE MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

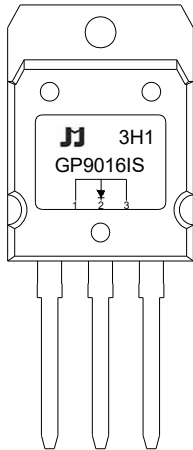
(Rating at 25°C ambient temperature unless otherwise specified and refer to a single diode.)

Parameter	Symbol	GP9016IS	GP9020IS	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	1600	2000	V
Maximum RMS voltage	$V_{RMS}$	1120	1400	V
Maximum DC blocking voltage	$V_{DC}$	1600	2000	V
Maximum average forward current at $T_L=100^\circ\text{C}$	$I_{F(AV)}$	90		A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	1150		A
Maximum forward voltage@ $I_F=90\text{A}$	$V_F$	1.2		V
Maximum DC reverse current at rated DC blocking voltage	$T_j=25^\circ\text{C}$	10		$\mu\text{A}$
	$T_j=150^\circ\text{C}$	1.5		mA
Typical junction capacitance $V_R=4.0\text{V}$ , $f=1\text{MHz}$	$C_J$	60		pF
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150		$^\circ\text{C}$

### THERMAL RESISTANCES

Symbol	Parameter	GP9016IS	GP9020IS	Unit
$R_{th(j-c)}$	Junction to case	1.6		$^\circ\text{C/W}$

MARKING



G	General Purpose Rectifier
P	Pin
90	$I_{F(AV)}=90A$
16	$V_{RRM}:1600V$
IS	Package: ITO-247

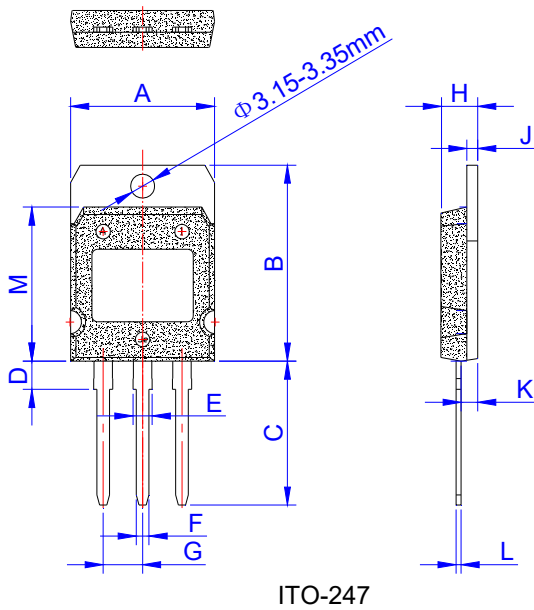
$\underline{x}H1$ : Month, 1、2、3 ~ 9、A、B、C

$3\underline{x}1$ :

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

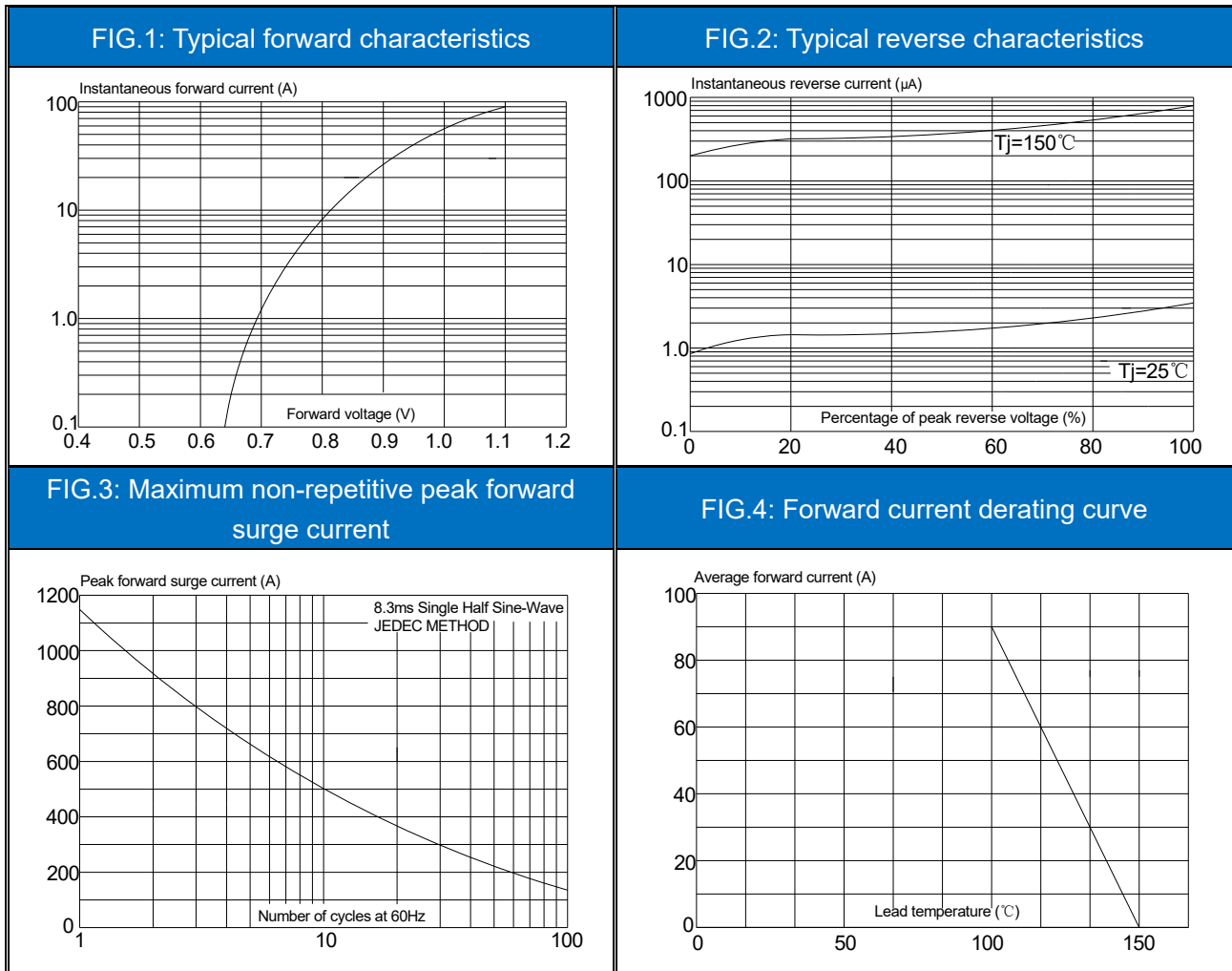


Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	19.7	19.9	20.1	0.776	0.783	0.791
B	26.9	27.1	27.3	1.059	1.067	1.075
C	19.4	19.9	20.4	0.764	0.783	0.803
D	3.80	3.90	4.00	0.150	0.154	0.157
E	2.56	2.66	2.76	0.101	0.105	0.109
F	1.66	1.76	1.86	0.065	0.069	0.073
G		5.45			0.215	
H	5.05	5.10	5.50	0.199	0.201	0.217
J	1.45	1.50	1.55	0.057	0.059	0.061
K	2.20	2.30	2.40	0.087	0.091	0.094
L	0.60	0.70	0.80	0.024	0.028	0.031
M	21.2	21.3	21.4	0.835	0.839	0.843

PACKAGE INFORMATION-ITO-247

OUTLINE	UNIT WEIGHT (g/PCS) typ.	TUBE (PCS)	PER CARTON (PCS)
TUBE	10.2	25	1,600

CHARACTERISTICS CURVE




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