



GP1606A~GP1610A GENERAL PURPOSE RECTIFIER

preliminary

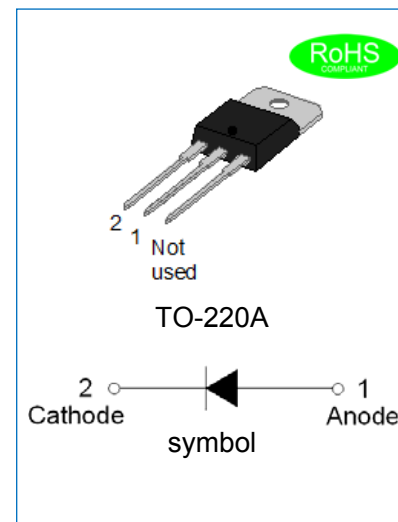
Rev.0.3

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-220A, 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: 2.3gram



ABSOLUTE MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

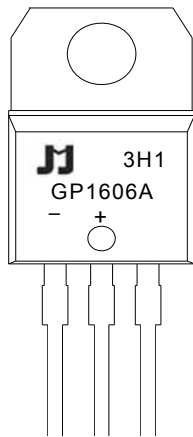
(Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	GP1606A	GP1608A	GP1610A	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	600	800	1000	V
Maximum RMS voltage	V_{RMS}	420	560	700	V
Maximum DC blocking voltage	V_{DC}	600	800	1000	V
Maximum average forward current at $T_C=100^\circ\text{C}$	$I_{F(AV)}$	16			A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	250			A
Maximum forward voltage @ $I_F=16\text{A}$	V_F	1.2			V
Maximum DC reverse current at rated DC blocking voltage	$T_J=25^\circ\text{C}$	I_R	5		μA
	$T_J=150^\circ\text{C}$		1000		μA
Typical junction capacitance $V_R=4.0\text{V}$, $f=1\text{MHz}$	C_J	130			pF
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150			$^\circ\text{C}$

THERMAL RESISTANCES

Symbol	Parameter	GP1606A	GP1608A	GP1610A	Unit
$R_{th(j-c)}$	Junction to case	4			°C/W

MARKING



G	General Purpose Rectifier
P	Pin
16	$I_{F(AV)}=16A$
06	$V_{RRM}:600V$
A	Package:TO-220A

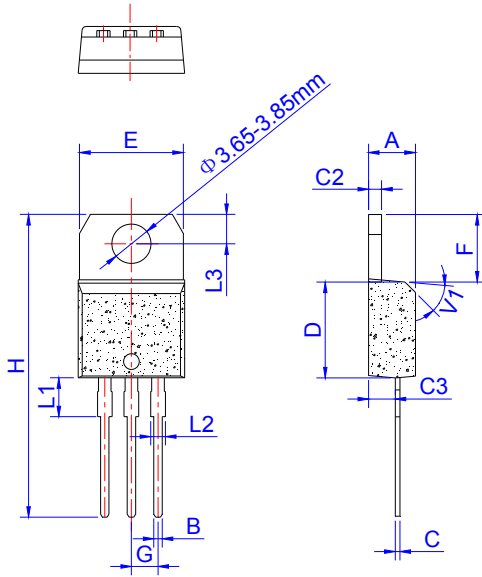
$\underline{x}H1$: Month, 1, 2, 3 ~ 9, A, B, C

$3\underline{x}1$:

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



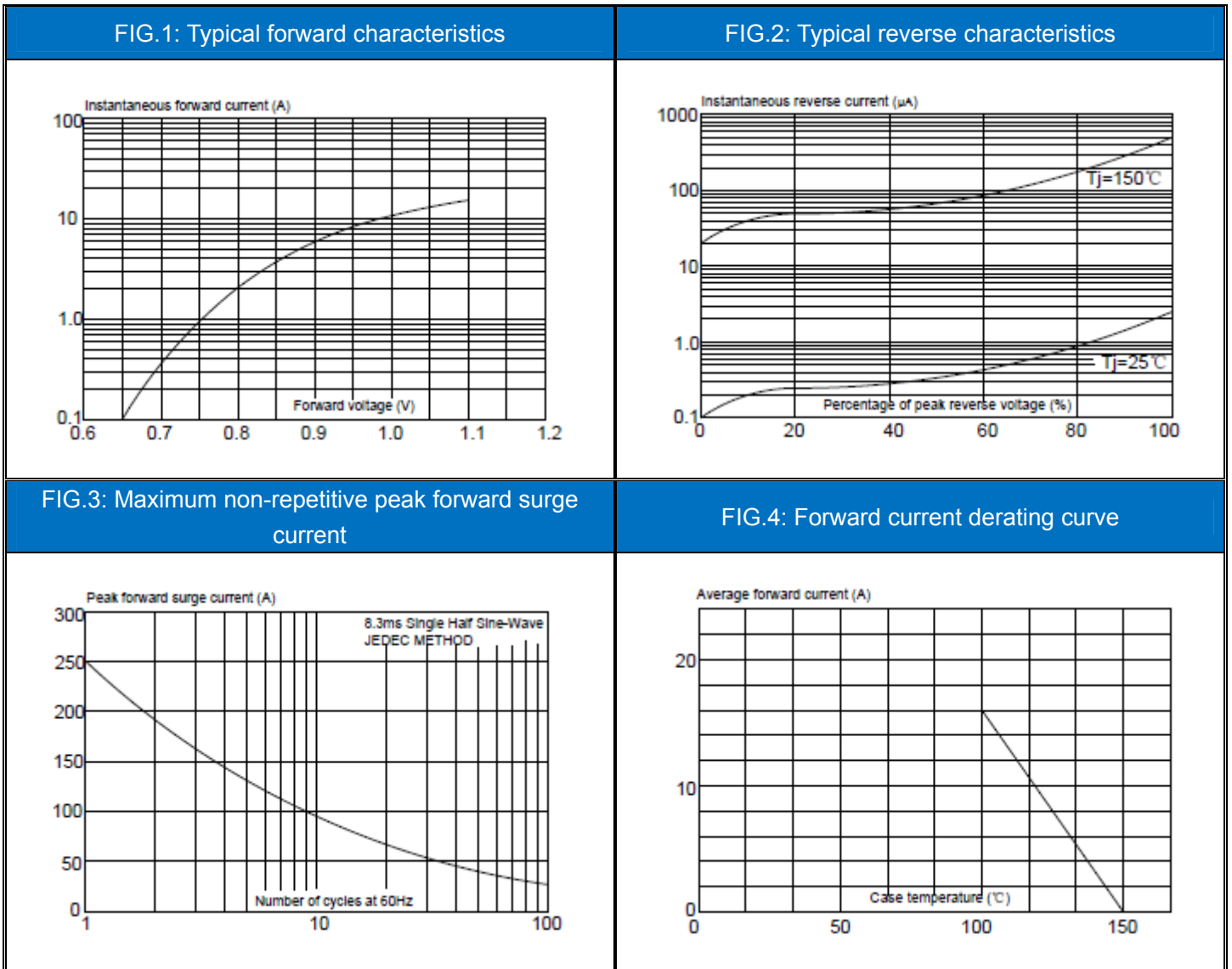
TO-220A

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.60	0.173		0.181
B	0.61		0.88	0.024		0.035
C	0.46		0.70	0.018		0.028
C2	1.21		1.32	0.048		0.052
C3	2.40		2.72	0.094		0.107
D	8.60		9.70	0.339		0.382
E	9.80		10.4	0.386		0.409
F	6.55		6.95	0.258		0.274
G	2.40		2.70	0.094		0.106
H	28.0		29.8	1.102		1.173
L1		3.75			0.148	
L2	1.14		1.70	0.045		0.067
L3	2.65		2.95	0.104		0.116
V1		45°			45°	

PACKAGE INFORMATION-TO-220A

OUTLINE	UNIT WEIGHT (g/PCS) typ.	TUBE (PCS)	PER CARTON (PCS)
TUBE	2.3	50	5,000

CHARACTERISTICS CURVE



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