



GP5016U GENERAL PURPOSE RECTIFIER

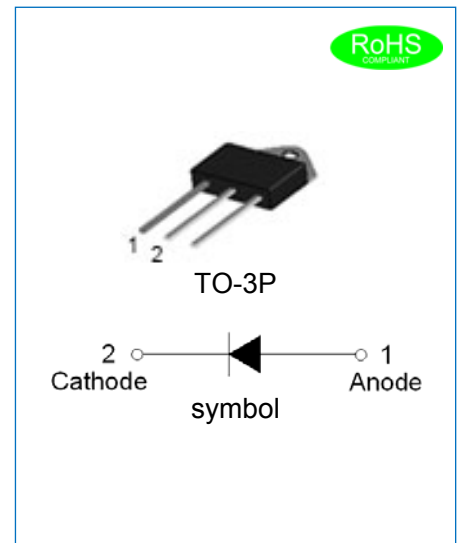
Rev.2.5

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-3P, 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
- ✧ Polarity: Pin 2 denotes cathode end
- ✧ Weight: 4.826 gram



ABSOLUTE MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

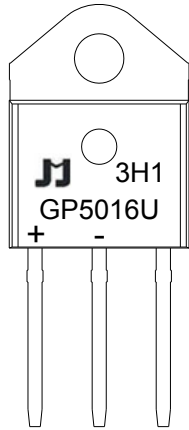
(Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	GP5016U	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	1600	V
Maximum RMS voltage	V_{RMS}	1120	V
Maximum DC blocking voltage	V_{DC}	1600	V
Maximum average forward current at $T_L=100^\circ\text{C}$	$I_{F(AV)}$	50	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	600	A
Maximum forward voltage @ $I_F=50\text{A}$	V_F	1.2	V
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_j=25^\circ\text{C}$	10 μA
		$T_j=150^\circ\text{C}$	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	GP5016U	Unit
$R_{th(j-c)}$	Junction to case	4	$^{\circ}C/W$

MARKING



G	General Purpose Rectifier
P	Pin
50	$I_{F(AV)}=50A$
16	$V_{RRM}:1600V$
U	Package: TO-3P

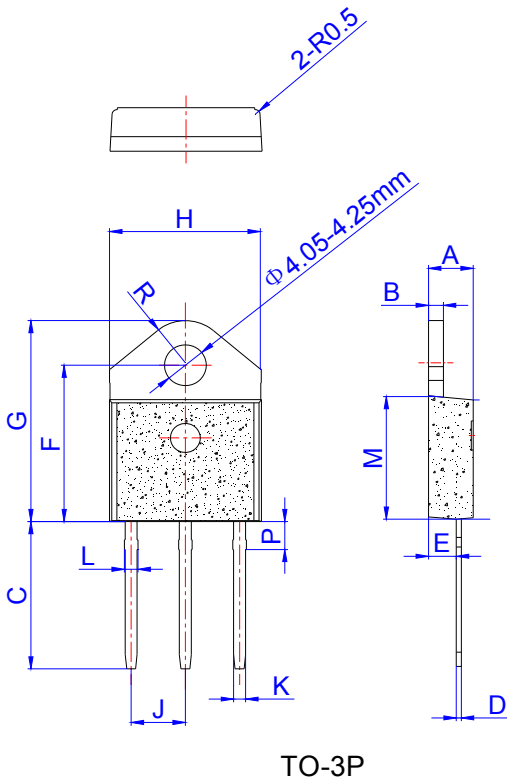
$xH1$: Month, 1、2、3 ~ 9、A、B、C

$3x1$:

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

PACKAGE MECHANICAL DATA

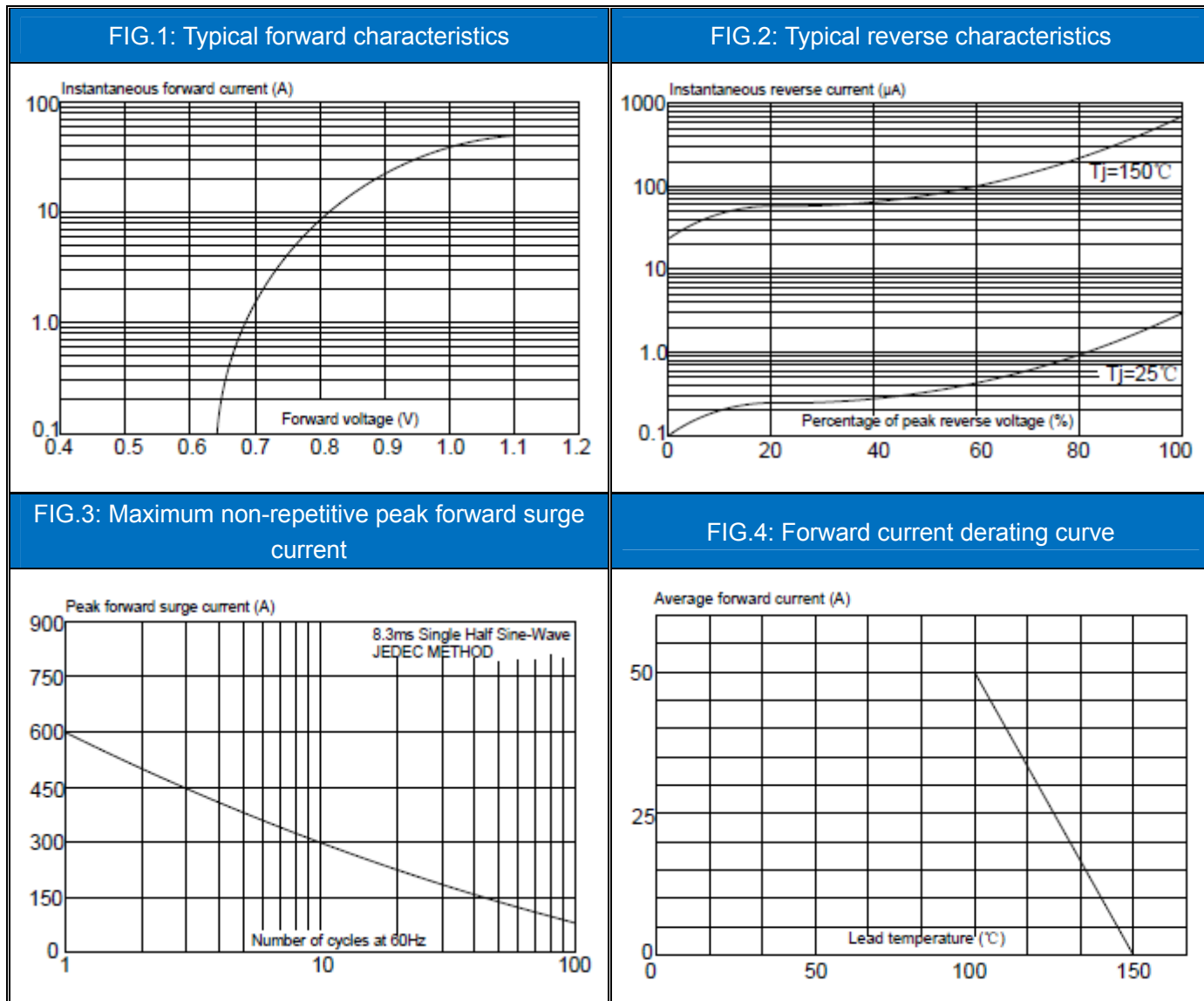


Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.60	0.173		0.181
B	1.45		1.55	0.057		0.061
C	14.35		15.60	0.565		0.614
D	0.50		0.70	0.020		0.028
E	2.70		2.90	0.106		0.114
F	15.80		16.50	0.622		0.650
G	20.40		21.10	0.803		0.831
H	15.10		15.50	0.594		0.610
J	5.40		5.65	0.213		0.222
K	1.10		1.40	0.043		0.055
L	1.35		1.50	0.053		0.059
M	12.37		12.77	0.487		0.503
P	2.80		3.00	0.110		0.118
R		4.35			0.171	

PACKAGE INFORMATION-TO-3P

OUTLINE	UNIT WEIGHT (g/PCS) typ.	TUBE (PCS)	PER CARTON (PCS)
TUBE	4.826	30	2,250

CHARACTERISTICS CURVE



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