



PG500R~PG510R FAST RECOVERY RECTIFIER

Preliminary

Rev.0.3

DESCRIPTION:

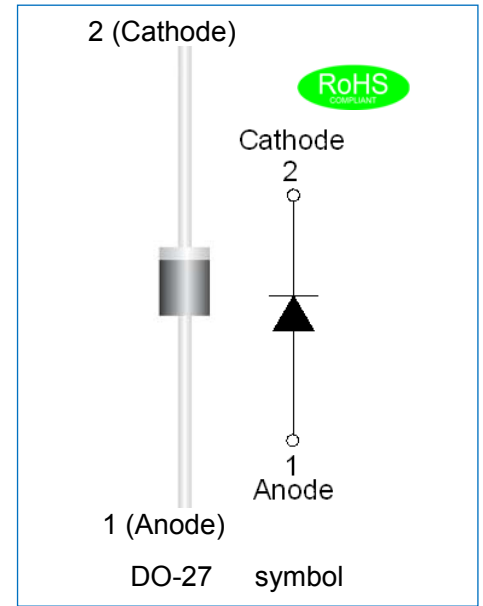
- ✧ Plastic package has underwriters laboratory flammability classification 94V-0
- ✧ Glass passivated chip junction
- ✧ Lead free in compliance with EU RoHS 2011/65/EU directive
- ✧ Fast recovery time

MECHANICAL DATA

- ✧ Case: JEDEC DO-27 molded plastic
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Polarity: Color band denotes cathode end
- ✧ Weight: 1.142 gram

ABSOLUTE MAXIMUM RATING

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

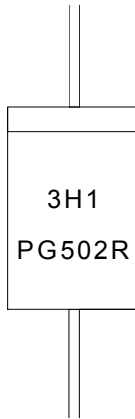


Parameter	Symbol	PG500R	PG501R	PG502R	PG504R	PG506R	PG508R	PG510R	Unit	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V	
Maximum average forward current at $T_L=75^\circ\text{C}$	$I_{F(AV)}$	5.0							A	
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120							A	
Maximum forward voltage @ $I_F=5\text{A}$	V_F	1.3							V	
Maximum DC reverse current at rated DC blocking voltage	$T_j=25^\circ\text{C}$	I_R							5.0	μA
	$T_j=150^\circ\text{C}$								500	μA
Typical Junction Capacitance $V_R=4.0\text{V}$, $f=1\text{MHz}$	C_J	65							pF	
Operating junction and storage temperature range	T_j, T_{stg}	-55 to +150							$^\circ\text{C}$	
Maximum reverse recovery time $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$	t_{rr}	150			250		500		ns	

THERMAL RESISTANCES

Symbol	Parameter	PG500R	PG501R	PG502R	PG504R	PG506R	PG508R	PG510R	Unit
$R_{th(j-L)}$	Junction to lead	15							$^{\circ}C/W$

MARKING:



PG	Fast Recovery Rectifier
5	$I_{F(AV)}=5A$
02	$V_{RRM}:200V$
R	Package:DO-27

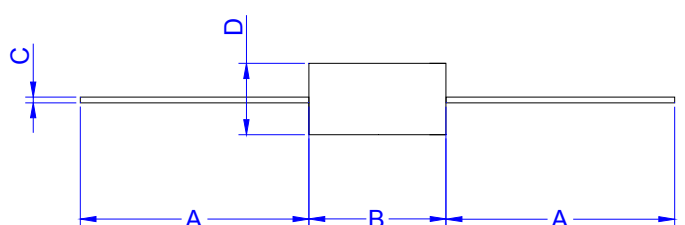
$\underline{x}H1$: Month, 1、2、3 ~ 9、A、B、C

$3\underline{x}1$:

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

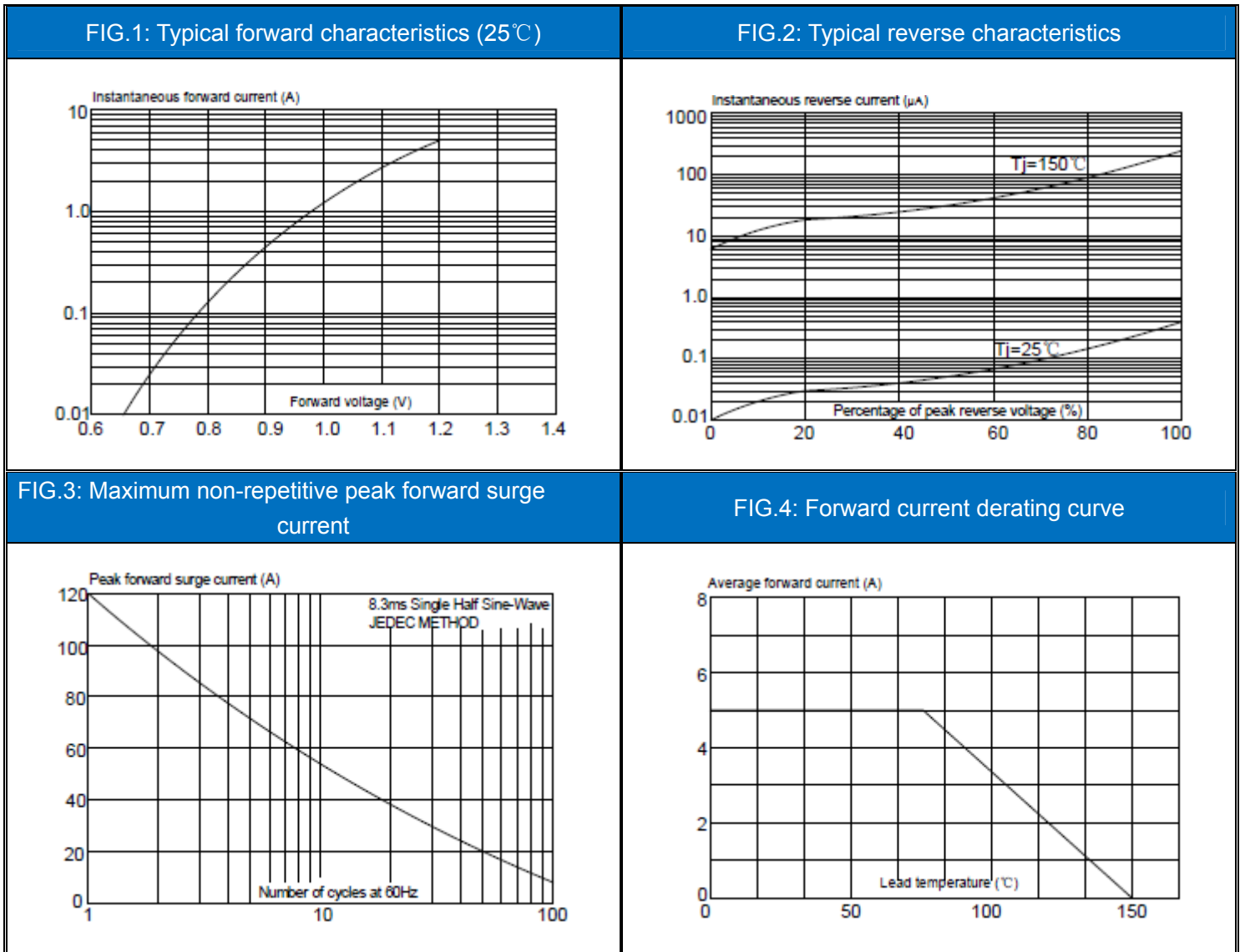
PACKAGE MECHANICAL DATA

 <p style="text-align: center;">DO-27</p>	Ref.	Dimensions			
		Millimeters		Inches	
		Min.	Max.	Min.	Max.
		A	25.40	-	1.000
B	7.20	9.60	0.283	0.378	
C	0.96	1.20	0.038	0.047	
D	4.80	5.40	0.189	0.213	

PACKAGE INFORMATION-DO-27

OUTLINE	UNIT WEIGHT (g/PCS) typ.	INNER BOX (PCS)	PER CARTON (PCS)
Bulk	1.142	1,000	10,000

CHARACTERISTICS CURVE



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