

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

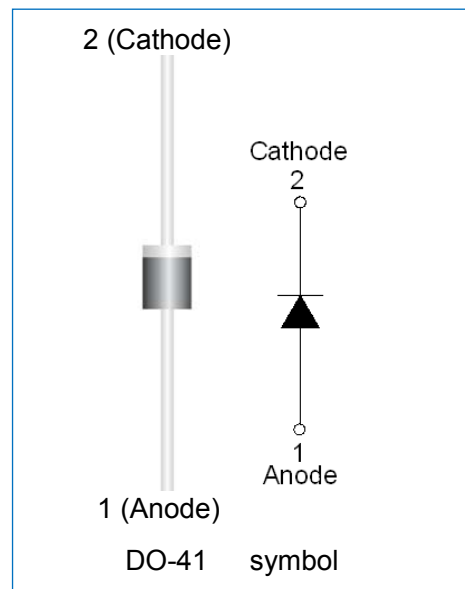
MECHANICAL DATA

- ✧ Case: JEDEC DO-41 molded plastic
- ✧ Terminals: Solder plated, solderable per J-STD-002
- ✧ Polarity: Color band denotes cathode end
- ✧ Weight: 0.30 gram

ABSOLUTE MAXIMUM RATING

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

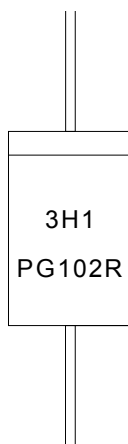
Parameter		Symbol	PG100R	PG101R	PG102R	PG104R	PG106R	PG108R	PG110R	Unit
Maximum repetitive peak reverse voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage		V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward current at $T_L=90^\circ\text{C}$		$I_{F(AV)}$	1.0							A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	30							A
Maximum forward voltage @ $I_F=1\text{A}$		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
	$T_j=150^\circ\text{C}$		200							μA
Typical Junction Capacitance $V_R=4.0\text{V}$, $f=1\text{MHz}$		C_J	9							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	PG100R	PG101R	PG102R	PG104R	PG106R	PG108R	PG110R	Unit
$R_{th(j-L)}$	Junction to lead	20							°C/W

MARKING:



PG	Fast Recovery Rectifier
1	$I_{F(AV)}=1A$
02	$V_{RRM}:200V$
R	Package:DO-41

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

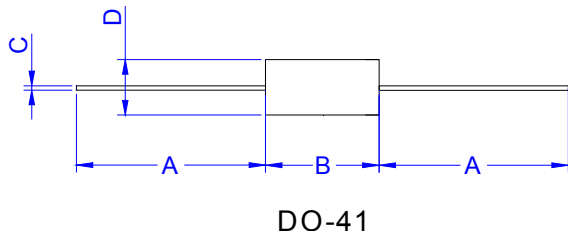
$3\underline{x}1$:

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.	Max.	Min.	Max.
A	25.40	-	1.000	-
B	4.90	5.30	0.193	0.209
C	0.69	0.89	0.027	0.035
D	2.40	2.80	0.095	0.110



PACKAGE INFORMATION-DO-41

OUTLINE	UNIT WEIGHT (g/PCS) typ.	INNER BOX (PCS)	PER CARTON (PCS)
Bulk	0.30	5,000	50,000

CHARACTERISTICS CURVE

FIG.1: Typical forward characteristics

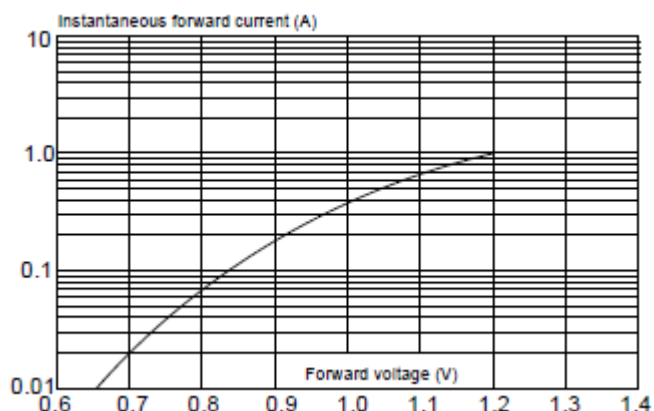


FIG.2: Typical reverse characteristics

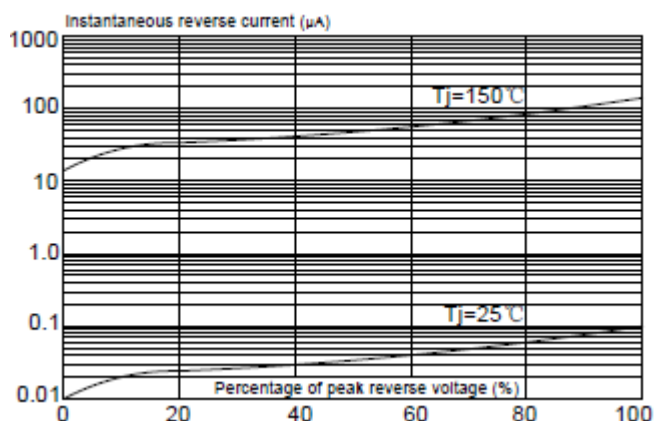


FIG.3: Maximum non-repetitive peak forward surge current

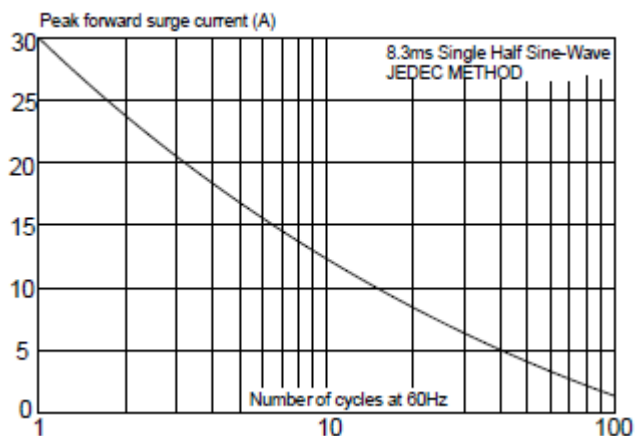


FIG.4: Forward current derating curve

