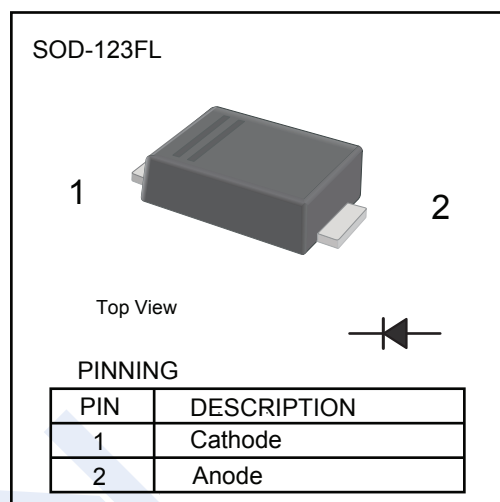


## Rectifiers

## 1KR3101D ~ 1KR3107D

## ■ Features

- Reverse Voltage - 50 to 1000 V
- Forward Current - 1.0 A
- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Ideal for automated placement
- Fast reverse recovery time



## ■ Absolute Maximum Ratings and Electrical characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	1KR 3101D	1KR 3102D	1KR 3103D	1KR 3104D	1KR 3105D	1KR 3106D	1KR 3107D	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		
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000		
Maximum Instantaneous Forward Voltage at 1A	$V_F$	1.1								A
Maximum Averaged Forward Rectified Current	$I_{F(AV)}$	1								
Peak Forward Surge Current, 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	30								
Maximum DC Reverse Current $T_a=25^\circ\text{C}$ at rated DC blocking voltage $T_a=125^\circ\text{C}$	$I_R$	5 50								$\mu\text{A}$
Typical Junction Capacitance *1	$C_j$	8 (TYP.)								pF
Typical Thermal Resistance *2	$R_{\theta JA}$	90								$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150								$^\circ\text{C}$

\* 1 Measured at 1MHz and applied reverse voltage of 4V D.C.

\* 2 P.C.B. mounted with 2.0" x 2.0" (5x5 cm) copper pad areas.

## ■ Marking

NO.	1KR 3101D	1KR 3102D	1KR 3103D	1KR 3104D	1KR 3105D	1KR 3106D	1KR 3107D
Marking	A1	A2	A3	A4	A5	A6	A7

# Rectifiers

## 1KR3101D ~ 1KR3107D

### ■ Typical Characteristics

Fig.1 Forward Current Derating Curve

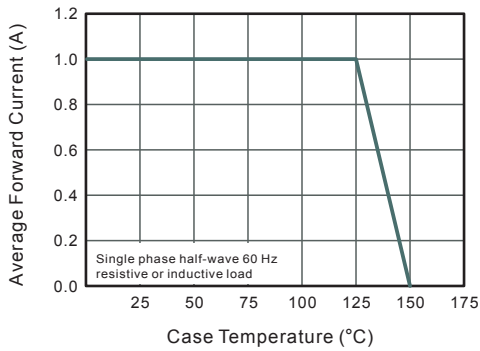


Fig.2 Typical Instaneous Reverse Characteristics

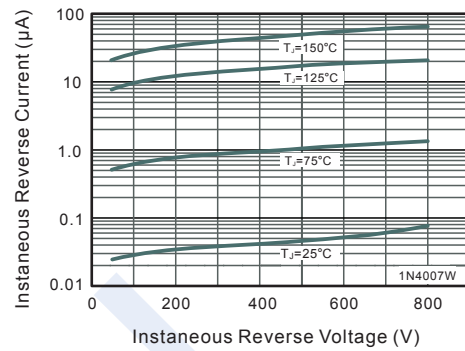


Fig.3 Typical Forward Characteristic

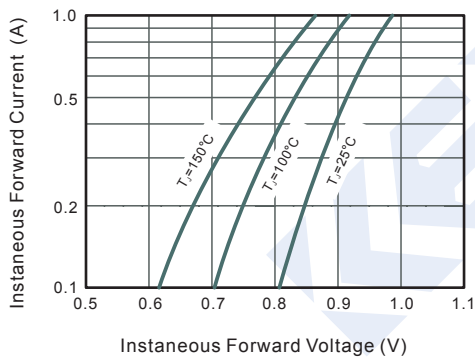


Fig.4 Typical Junction Capacitance

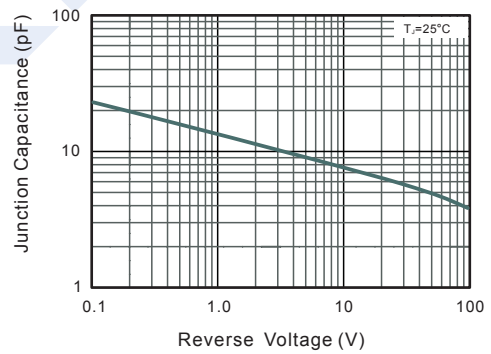
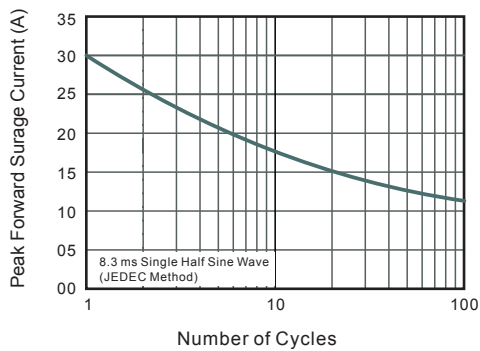


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



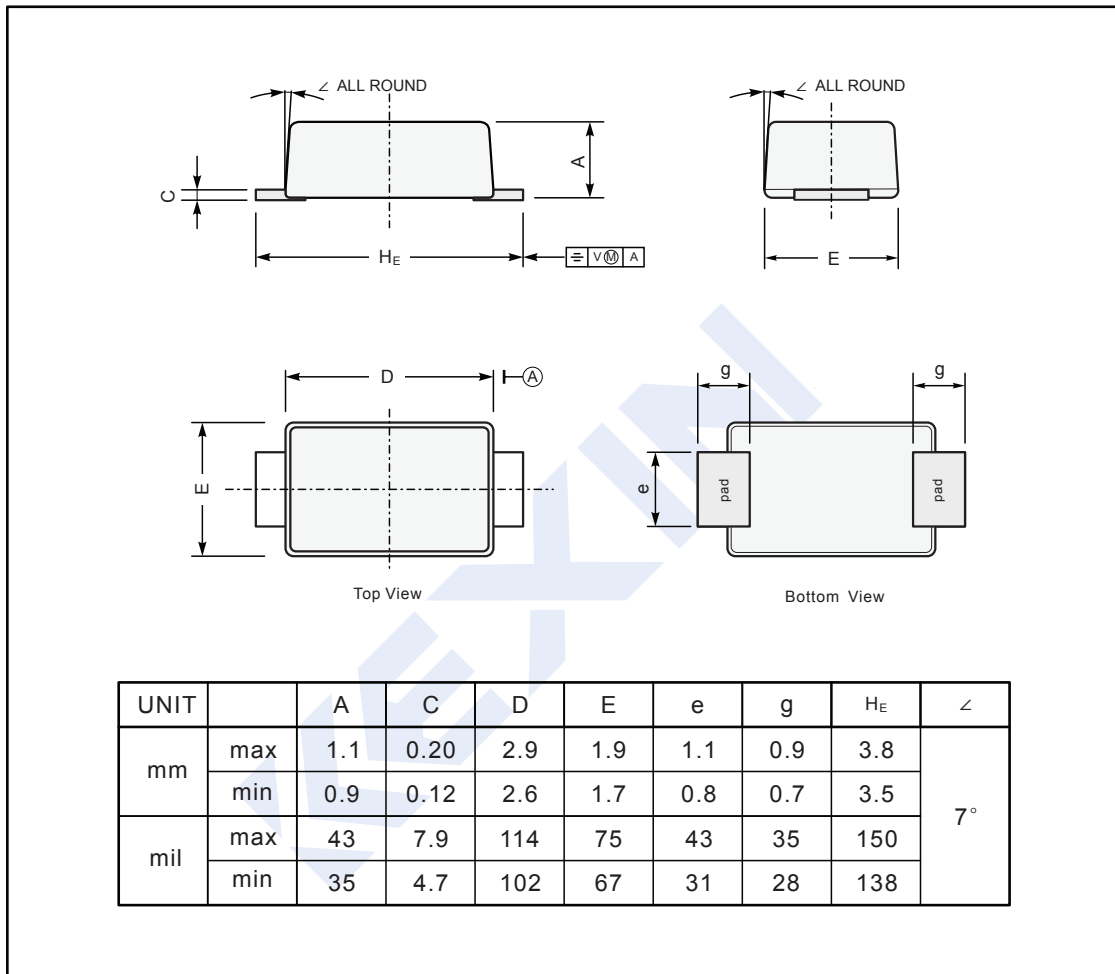
Rectifiers

1KR3101D ~ 1KR3107D

■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SOD-123FL



■ The Recommended Mounting Pad Size

