

# RKV650KL

## Variable Capacitance Diode

REJ03G1286-0100

Rev.1.00

Oct 27, 2005

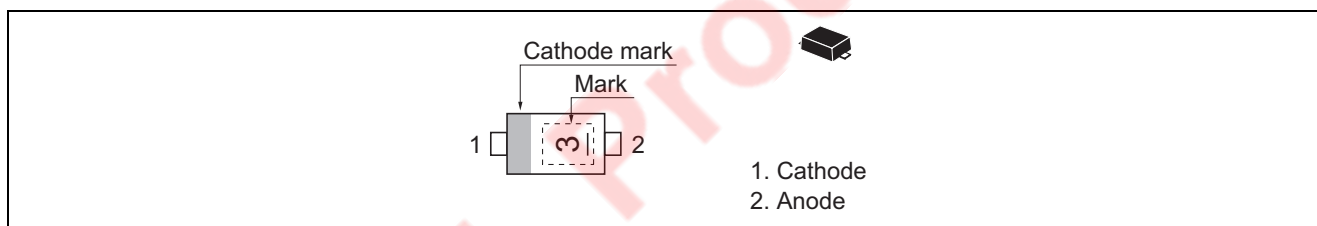
### Features

- Most suitable for terrestrial digital TV broadcasts capable Mobile phones.
- High capacitance ratio. ( $n = 3.25$  min)
- Low series resistance. ( $r_s = 0.75 \Omega$  max)
- Extremely small Flat Lead Package (EFP) is suitable for surface mount design.

### Ordering Information

Type No.	Laser Mark	Package Name	Package Code (Previous Code)
RKV650KL	3	EFP	PXSF0002ZA-A (EFP)

### Pin Arrangement



## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	15	V
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

## Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	$I_{R1}$	—	—	10	nA	$V_R = 10\text{ V}$
	$I_{R2}$	—	—	100		$V_R = 10\text{ V}$ , $T_a = 60^\circ\text{C}$
Capacitance	$C_{0.5}$	7.20	—	7.80	pF	$V_R = 0.5\text{ V}$ , $f = 1\text{ MHz}$
	$C_{2.5}$	2.05	—	2.35		$V_R = 2.5\text{ V}$ , $f = 1\text{ MHz}$
Capacitance ratio	n	3.25	—	3.70	—	$C_{0.5} / C_{2.5}$
Series resistance	$r_s$	—	—	0.75	$\Omega$	$V_R = 1\text{ V}$ , $f = 470\text{ MHz}$

Note: 1. For EFP package, the material of lead is exposed for cutting plane. There for, soldering nature of lead tip part is considered as unquestioned. Please kindly consider soldering nature.

## Main Characteristic

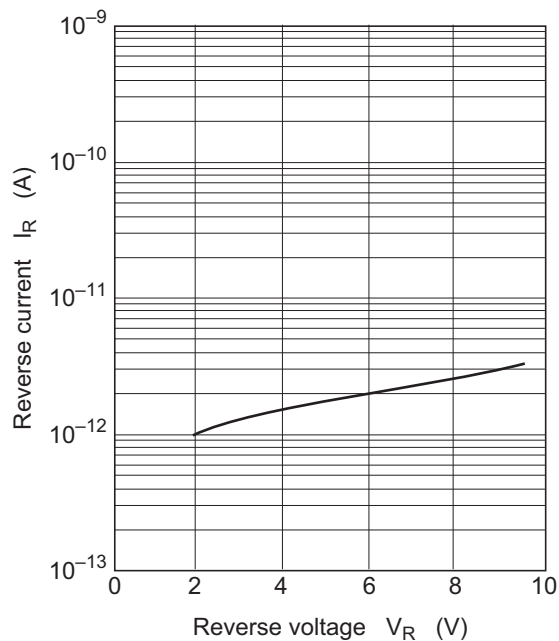


Fig.1 Reverse current vs. Reverse voltage

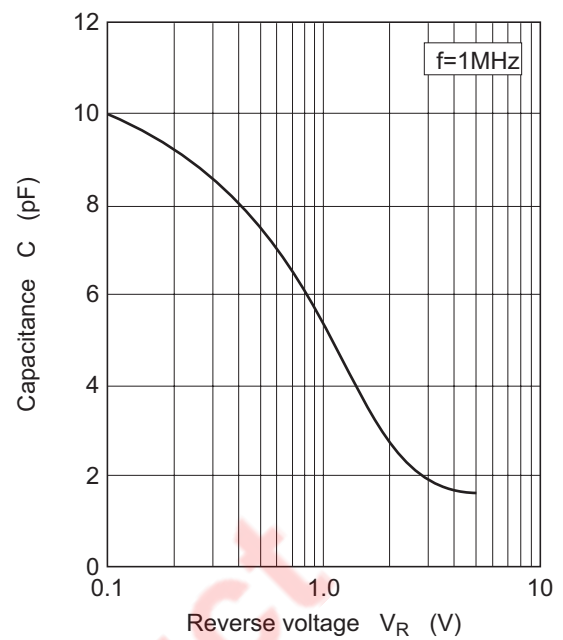


Fig.2 Capacitance vs. Reverse voltage

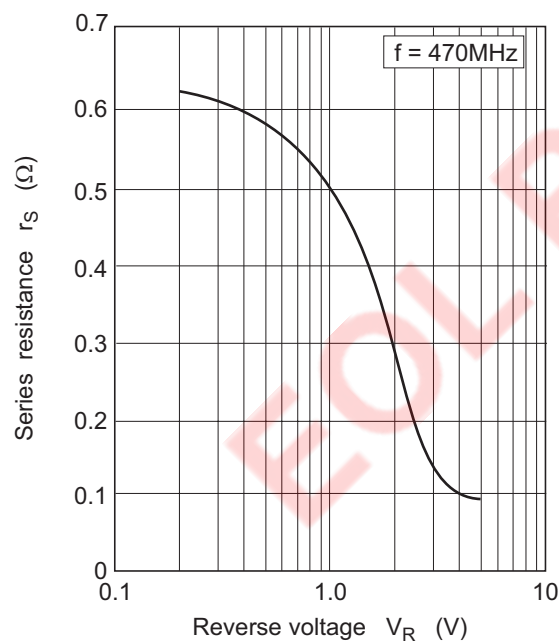


Fig.3 Series resistance vs. Reverse voltage

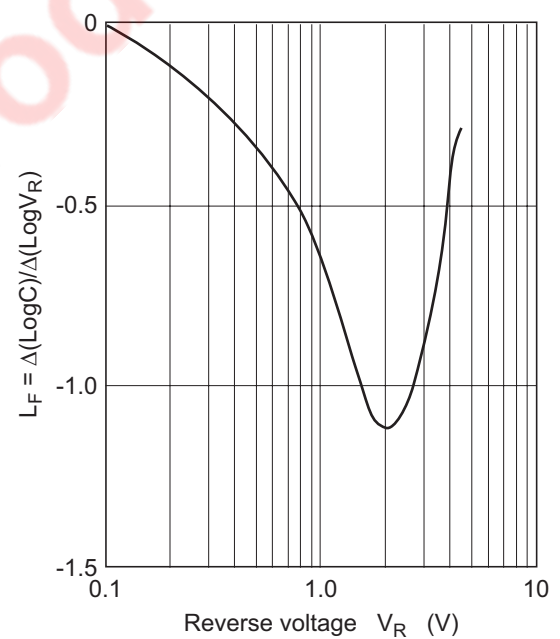
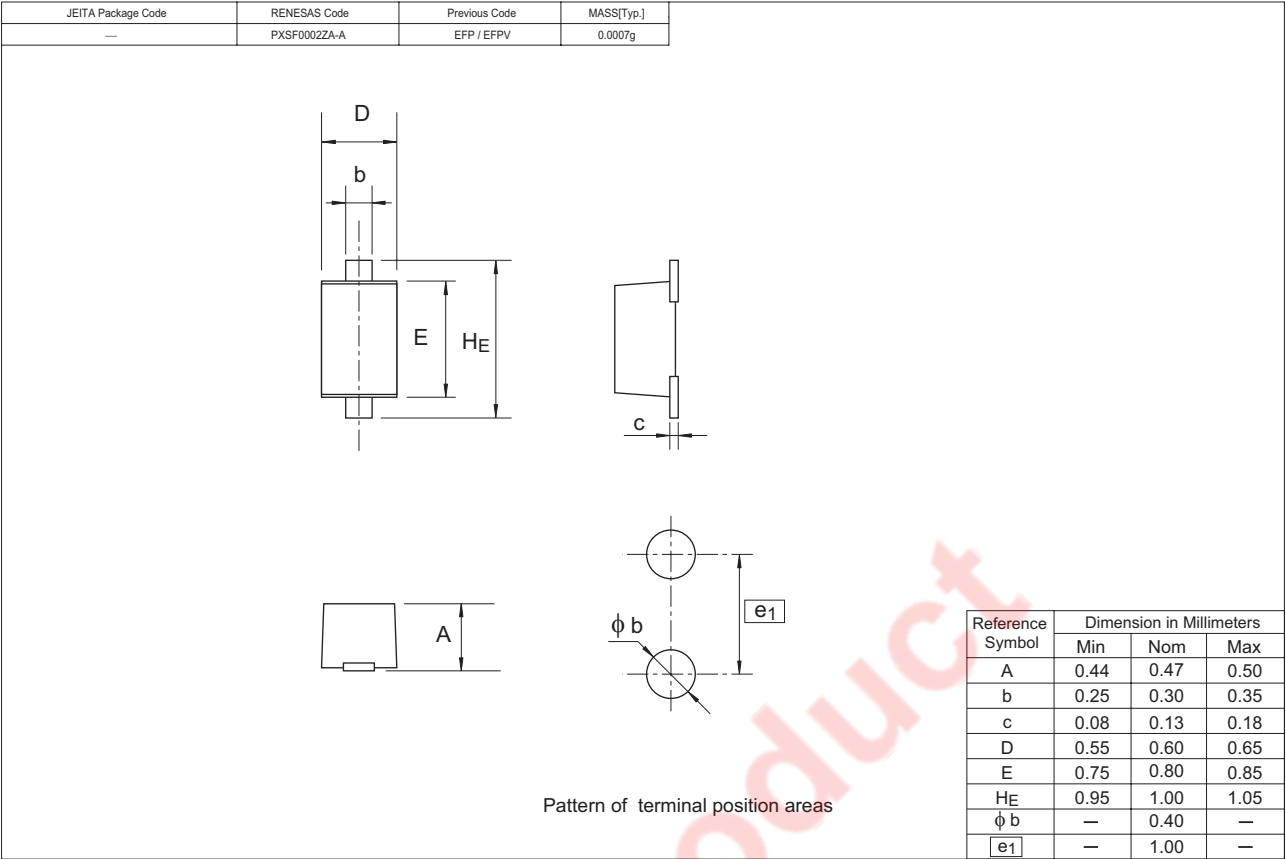


Fig.4 Linearity factor vs. Reverse voltage

Package Dimensions



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