

# RKV650KL

## Variable Capacitance Diode

REJ03G1286-0100

Rev.1.00

Oct 27, 2005

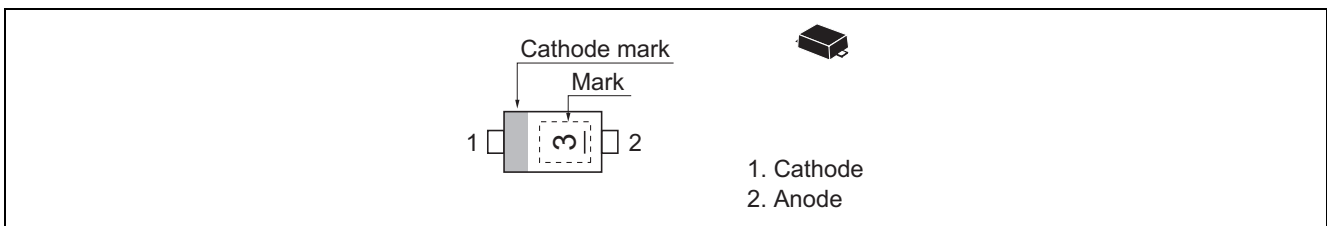
### Features

- 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

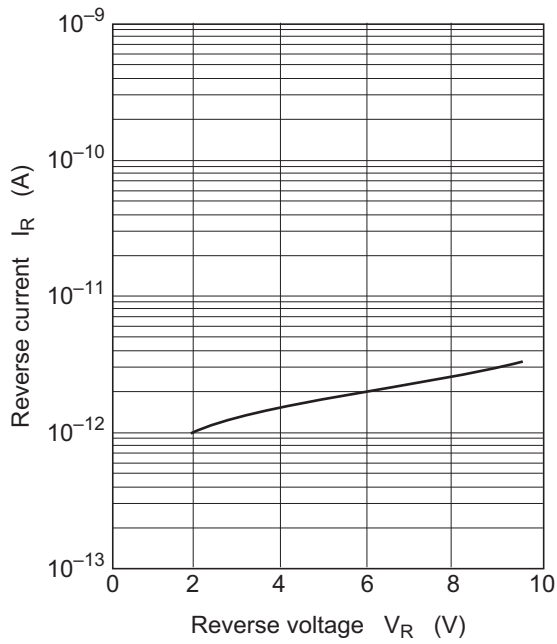


Fig.1 Reverse current vs. Reverse voltage

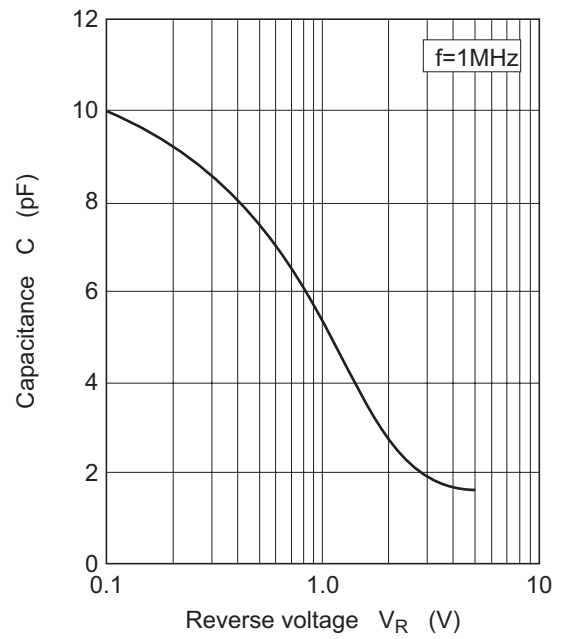


Fig.2 Capacitance vs. Reverse voltage

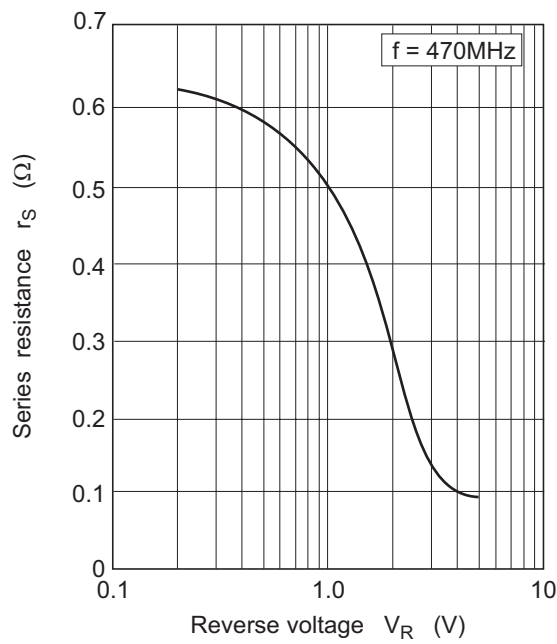


Fig.3 Series resistance vs. Reverse voltage

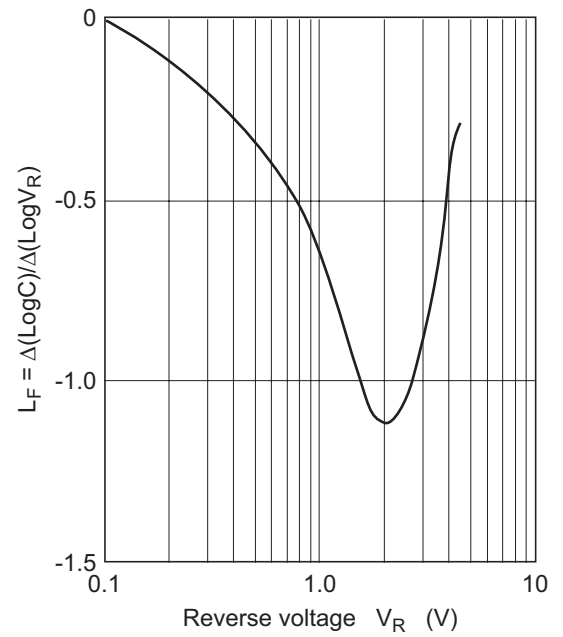
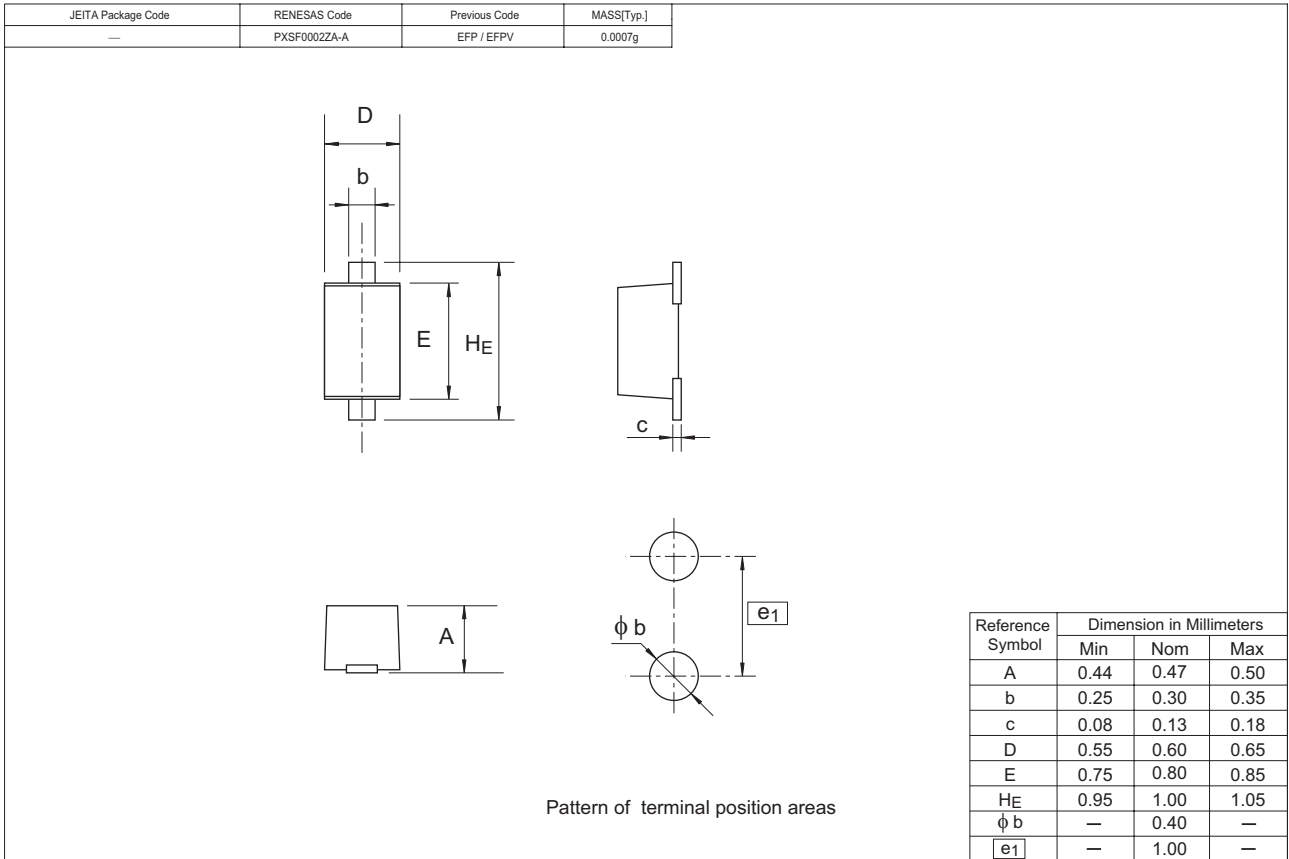


Fig.4 Linearity factor vs. Reverse voltage

## Package Dimensions



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