HVL388C

Variable Capacitance Diode for VCO

REJ03G0363-0200
Rev.2.00
Mar 15, 2006

Features

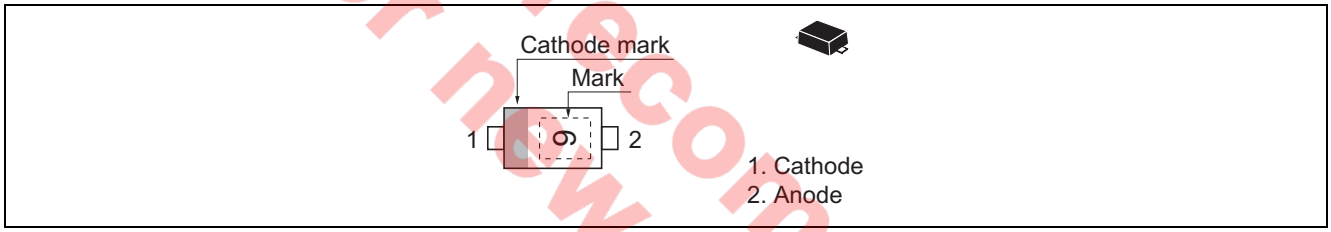
- High capacitance ratio. (n = 1.880 min)
- Low series resistance. (rs = 0.75 Ω max)
- Extremely small Flat Lead Package (EFP) is suitable for surface mount design.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code
HVL388C	9	EFP	PXSF0002ZA-A

Not recommend for new design

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	15	V
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–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 = 15 V
	I_{R2}	—	—	50		V_R = 15 V, Ta = 60°C
Capacitance	C_1	3.162	—	3.465	pF	V_R = 1 V, f = 1 MHz
	C_3	1.570	—	1.720		V_R = 3 V, f = 1 MHz
Capacitance ratio	n	1.880	—	2.150	—	C_1 / C_3
Series resistance	r_S	—	—	0.75	Ω	V_R = 1 V, f = 470 MHz

Note: 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.

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Main Characteristic

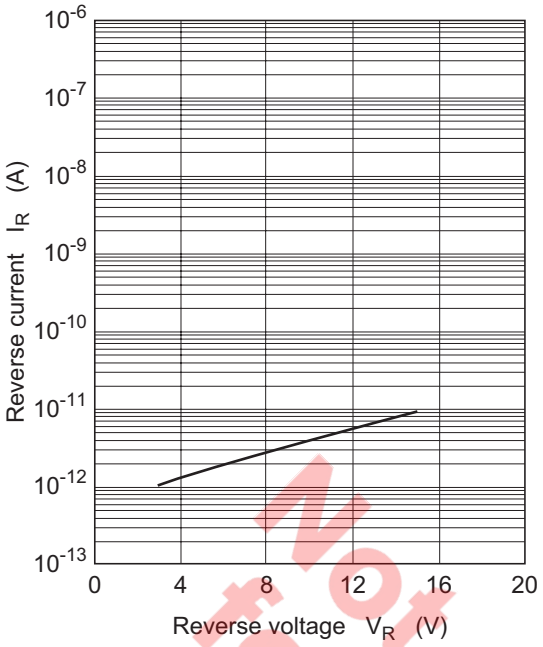


Fig.1 Reverse current vs. Reverse voltage

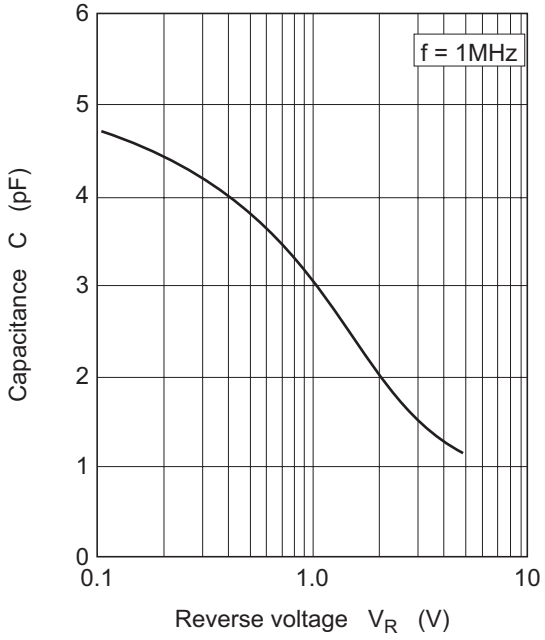


Fig.2 Capacitance vs. Reverse voltage

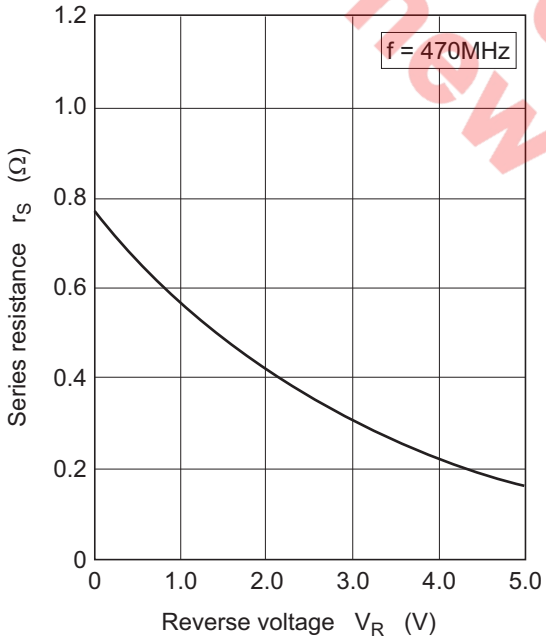
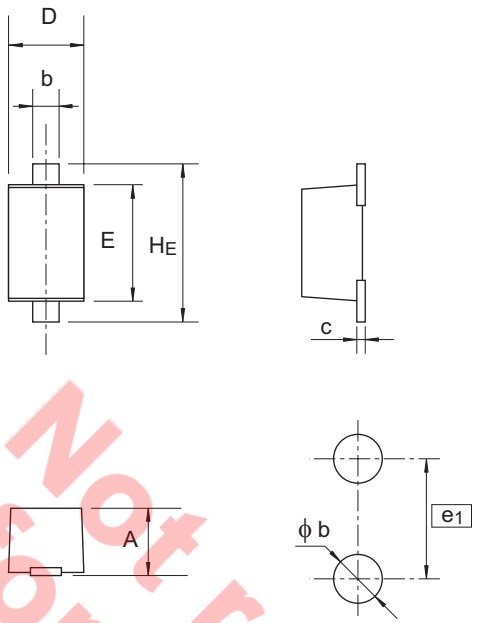


Fig.3 Series resistance vs. Reverse voltage

Not recommend for new design

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
EFP	—	PXSF0002ZA-A	EFP / EFPV	0.0007g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.44	0.47	0.50
b	0.25	0.30	0.35
c	0.08	0.13	0.18
D	0.55	0.60	0.65
E	0.75	0.80	0.85
H_E	0.95	1.00	1.05
ϕ b	—	0.40	—
e1	—	1.00	—

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