

Variable capacitance diode for FM tuning
FMチューナ用電圧可変容量ダイオード

KV1735RTL-G, KV1735STL-G

FEATURES

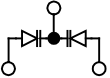
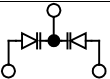
- Included Twin Element
 - Very Small Tolerance of Element Being Next Device To Each Other
 - Excellent Linearity of The CV Curve
 - Extra Large Capacitance Ratio: A=3.30 to
 - Very Small Series Resistance: R_s to 0.3Ω
- ツインタイプ素子1組搭載
 - 小さい隣接デバイス間容量偏差
 - CV特性の優れた直線性
 - 極めて大きな容量変化比: A=3.30~
 - 小さい直列抵抗: R_s ≈ 0.3Ω

CLASSIFICATION

Rank		1	2	3	4
C	MIN	68.86	70.81	72.80	74.85
C ₂	MAX	71.52	73.53	75.61	77.74

PACKAGE OUTLINE

ORDERING INFORMATION

Part name	Package	Marking	Pin configuration	Ordering information
KV1735R-G	 SOT23C-3	D3●		KV1735RTL-G...Storage direction: TL(Left type)
KV1735S-G	 SOT23-3	C35●		KV1735STL-G...Storage direction: TL(Left type)

ABSOLUTE MAXIMUM RATINGS

Parameter	項目	Symbol	記号	Rating	定格	Unit	単位	Remarks	備考
Reverse Voltage	逆方向電圧	V_R		16		V			
Forward Current	順方向電流	I_F		50		mA			
Power Dissipation	許容消費電力	P_D		100		mW			
Storage Temperature Range	保存温度範囲	T_{STG}		-55 to 150		°C			
Operating Temperature Range	動作温度範囲	T_{OP}		-55 to +85		°C			

ELECTRICAL CHARCTERISTICS

$T_A=25^{\circ}\text{C}$

Parameter 項目	Symbol 記号	Value			Units 単位	Conditions 条件
		MIN	TYP	MAX		
Reverse Voltage 逆方向電圧	V_R	12			V	$I_R=10\mu\text{A}$
Reverse Current 逆方向電流	I_R			10.0	nA	$V_R=10\text{V}$
Diode Capacitance 容量値	C_2	68.86		77.74	pF	$V_R=2.0\text{V}, f=1\text{MHz}$
	C_6	26.39		36.69	pF	$V_R=6.0\text{V}, f=1\text{MHz}$
	C_9	16.91		22.25	pF	$V_R=9.0\text{V}, f=1\text{MHz}$
Series Resistance 直列抵抗	R_S			0.30	Ω	$V_R=2.0\text{V}, f=100\text{MHz}$
Capacitance Ratio 容量変化比	A	3.30		4.60		C_2/C_9

- * Capacitance measured in parallel connections.
容量値は、Back to Back Typeの2つのダイオードの平均値です。
- * Diode Capacitance measured with Agilent 4279A or equivalent instruments (at OSC level 20±5mVrms)
容量測定器は、Agilent 4279A又は相当品。OSCレベル 20±5mVrms。
- * Resistance meter is Agilent 4291B or equivalent instruments.
直列抵抗測定器は、Agilent 4291B又は相当品。

TYPICAL CHARCTERISTICS

