Ordering number:ENN6263A

Hyper-Abrupt Junction Type Silicon Composite Varactor

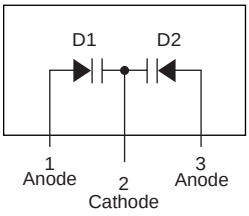
SVC348

AM Low Voltage Electronic Tuning Applications

Features

- Twin type varactor diode for AM electronic tuning use.
- High capacitance ratio and high quality factor.
- Possible to offer the SVC348 devices in a tape reel packaging.

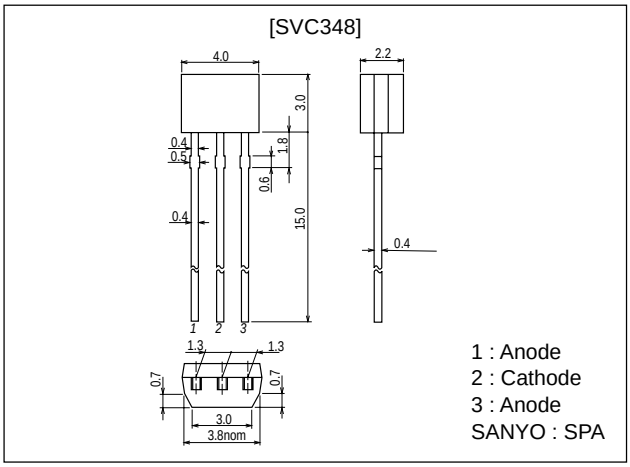
Electrical Connection



Package Dimensions

unit:mm

1292



Specifications

Absolute Maximum Ratings at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V_R		16	V
Junction Temperature	Tj		125	˚C
Storage Temperature	Tstg		–55 to +125	˚C

Electrical Characteristics at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	$V_{(BR)R}$	I_R=10μA	16			V
Reverse Current (One diode)	I_R	V_R=9V			100	nA
Interterminal Capacitance (Capacitance value of one diode)	C_{1V}	V_R=1V, f=1MHz *1	470*		525*	pF
	C_{6V}	V_R=6V, f=1MHz		55		pF
	C_{8V}	V_R=8V, f=1MHz	20		26	pF
Quality Factor	Q	V_R=1V, f=1MHz	200			
Capacitance Ratio	CR	C_{1V}/C_{8V}, f=1MHz	18.5			
Matching Tolerance *2	ΔCm	(Cmax–Cmin)/Cmin ×100				
		V_R=1V, f=1MHz			1.5	%
		V_R=6V, f=1MHz			2.0	%
		V_R=8V, f=1MHz			2.0	%

*1 : 1MHz signal : 20mVrms
*2 : Between D1 and D2 Matching Tolerance
* : SVC348 are classified by C_{1V} as right :

Rank	C_{1V}(pF)
S	470 to 505
T	485 to 525

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