Diffused Junction Type Silicon Composite Varactor



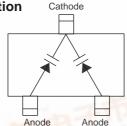
SVC383

AM Low Voltage Electronic Tuning Applications

Features

- Twin type varactor diode for low-voltage AM electronic tuning use.
- · Low voltage (6.5V).
- · High Q.
- · Possible to offer the SVC383 devices in a tape reel packaging.
- · Surface mount type.
- Small-sized package, permitting SVC383-applied sets to be compact and slim.

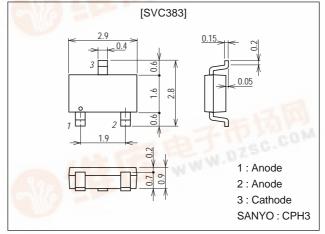
Electrical Connection



Package Dimensions

unit:mm

1293



Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V _R		33	V
Junction Temperature	Tj		125	°C
Storage Temperature	Tstg		-55 to +125	°C

Electrical Characteristics at Ta = 25°C

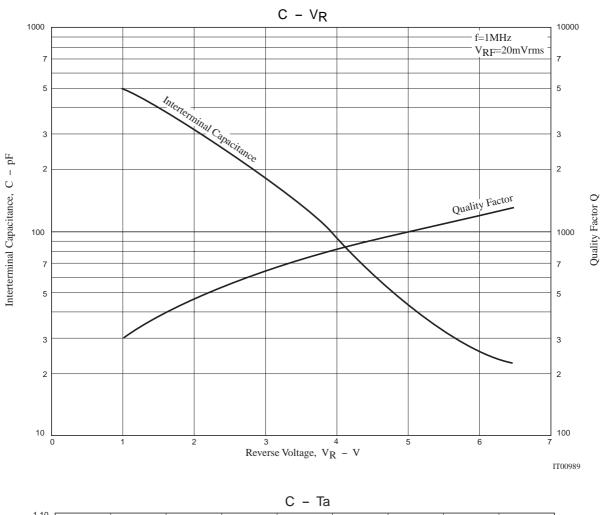
Parameter	Symbol	Conditions		Ratings		
	Symbol		min	typ	max	Unit
Breakdown Voltage	V _{(BR)R}	I _R =10µA	33			V
Reverse Current	IR	V _R =20V			100	nA
Interterminal Capacitance *1	C _{1V}	V _R =1V, f=1MHz *2	482*		540*	pF
	C _{4.5V}	V _R =4.5V, f=1MHz		64		pF
	C _{6.5V}	V _R =6.5V, f=1MHz	21		27	pF
Quality Factor	Q	V _R =1V, f=1MHz	200		17	111
Capacitance Ratio	CR	C _{1V} /C _{6.5V}	17.5		24.5	
Matching Tolerance	ΔCm	(Cmax–Cmin)/Cmin ×100 (Between D1 and D2) V _R =1V to 6.5V		u 07	2.0	%

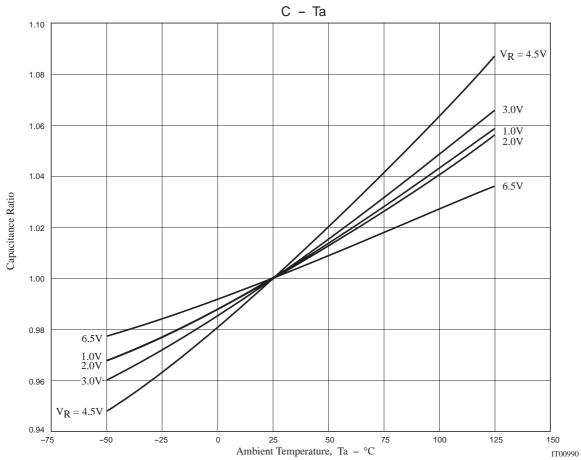
- *1: The values of interterminal capacitance represent the average of measurements for two elements.
- *2:1MHz signal:20mVrms
- * : SVC383 are classified by C_{1V} as right :

Rank	C _{1V} (pF)
S	482 to 515
T	505 to 540

Marking: V3
Capacitance rank: S, T

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