SVC276

ON Semiconductor®

http://onsemi.com

Varactor Diode

Monolithic dual Varactor Diode for FM Tuning 16V, 50nA, CR=3.1, Q=100, MCPH3

Features

- · Twin type with a good linearity of C-V characteristic. Excels in large input characteristic
- · Small package permits SVC276-applied sets to be compact and slim
- High capacitance ratio (VR=2.0 to 8.0V)
- · High Quality Factor

Specifications

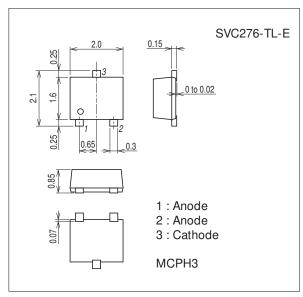
Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	VR		16	V
Junction Temperature	Tj		125	°C
Storage Temperature	Tstg		-55 to +125	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

Package Dimensions

unit: mm (typ) 7019A-002

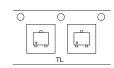


Product & Package Information

• Package

• JEITA, JEDEC : SC-70, SOT-323 • Minimum Packing Quantity : 3,000 pcs./reel

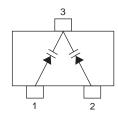
Packing Type: TL



Marking



Electrical Connection



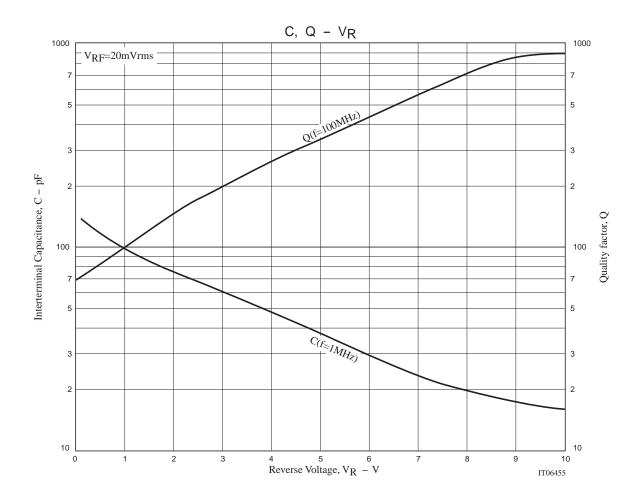
Electrical Characteristics at Ta=25°C

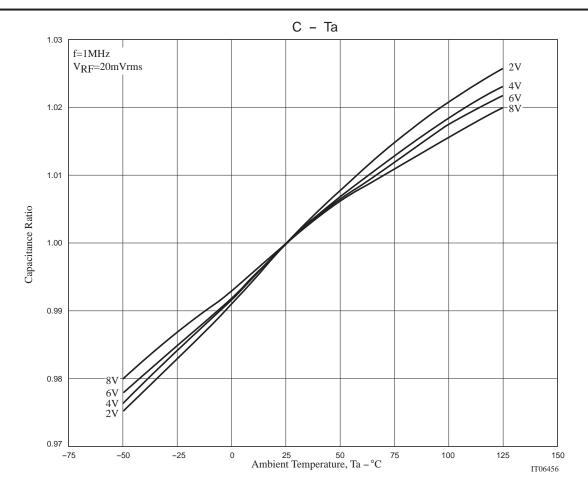
Parameter	Symbol	Conditions	Ratings			- Unit
	Symbol	Conditions	min	typ	max	UIIIL
Breakdown Voltage	V(BR)R	I _R =10μA	16			V
Reverse Current	IR	V _R =10V			50	nA
Interterminal Capacitance*	C2.0V	V _R =2.0V, f=1MHz	73.72		79.77	pF
	C6.0V	V _R =6.0V, f=1MHz	25.50		33.61	pF
	C8.0V	V _R =8.0V, f=1MHz	18.04		23.78	pF
Quality Factor	Q	V _R =2.0V, f=100MHz	100			
Capacitance Ratio	CR	C2.0V / C8.0V	3.1			

Note)*: Capacitance value per each diode

Ordering Information

Device	Package	Shipping	memo	
SVC276-TL-E	SVC276-TL-E MCPH3		Pb Free	



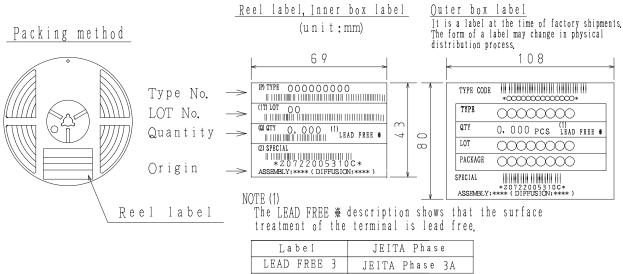


Taping Specification

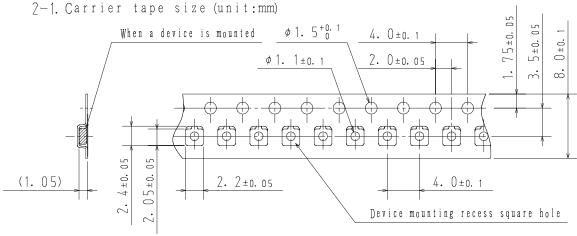
SVC276-TL-E

1. Packing Format

Package Name	Carrier Tape	Maximun Number of devices contained (pcs)			Packing	g format		
	Туре	Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)		
мсрн3	мсрн3	3,000	15, 000	90,000	5 reels contained	6 inner boxes contained		
					Dimensions:mm (external)	Dimensions:mm (external)		
					183×72×185	440×195×210		

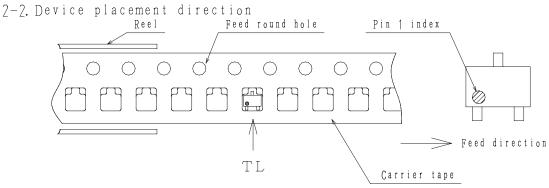


2. Taping configuration



LEAD FREE 4

JEITA Phase 3



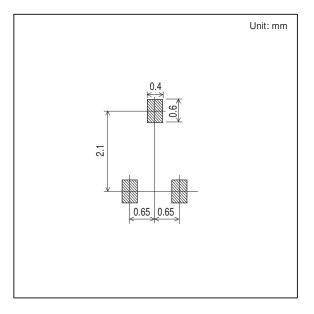
Those with pin 1 index on the feed hole side·····TL

Outline Drawing

SVC276-TL-E

Mass (g) Unit 0.007 For reference mm 2.040.06 3 2.040.06 2.040.06 2.040.06 3.15.01 41:Let indication

Land Pattern Example



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