



ON Semiconductor®

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# SVC710

## Varactor Diode

### Single Varactor Diode for VCO

15V, 20nA, CR=4.8,  $r_s=1.6\Omega$ , MCPH3

#### Features

- High capacitance ratio
- Low voltage drive
- Small-sized package : MCPH

#### Specifications

Absolute Maximum Ratings at Ta=25°C

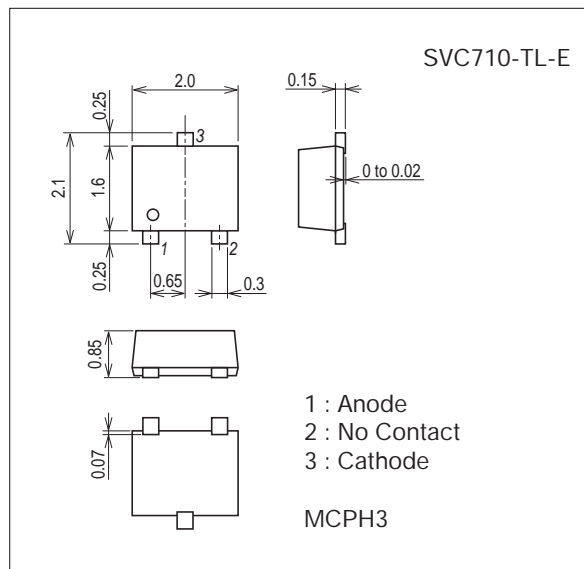
Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	$V_R$		15	V
Junction Temperature	$T_j$		150	°C
Storage Temperature	$T_{stg}$		-55 to +150	°C

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)

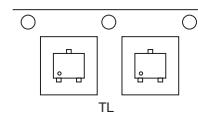
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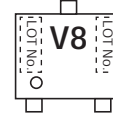
#### Product & Package Information

- Package : MCPH3
- JEITA, JEDEC : SC-70, SOT-323
- Minimum Packing Quantity : 3,000 pcs./reel

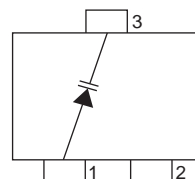
#### Packing Type : TL



#### Marking



#### Electrical Connection



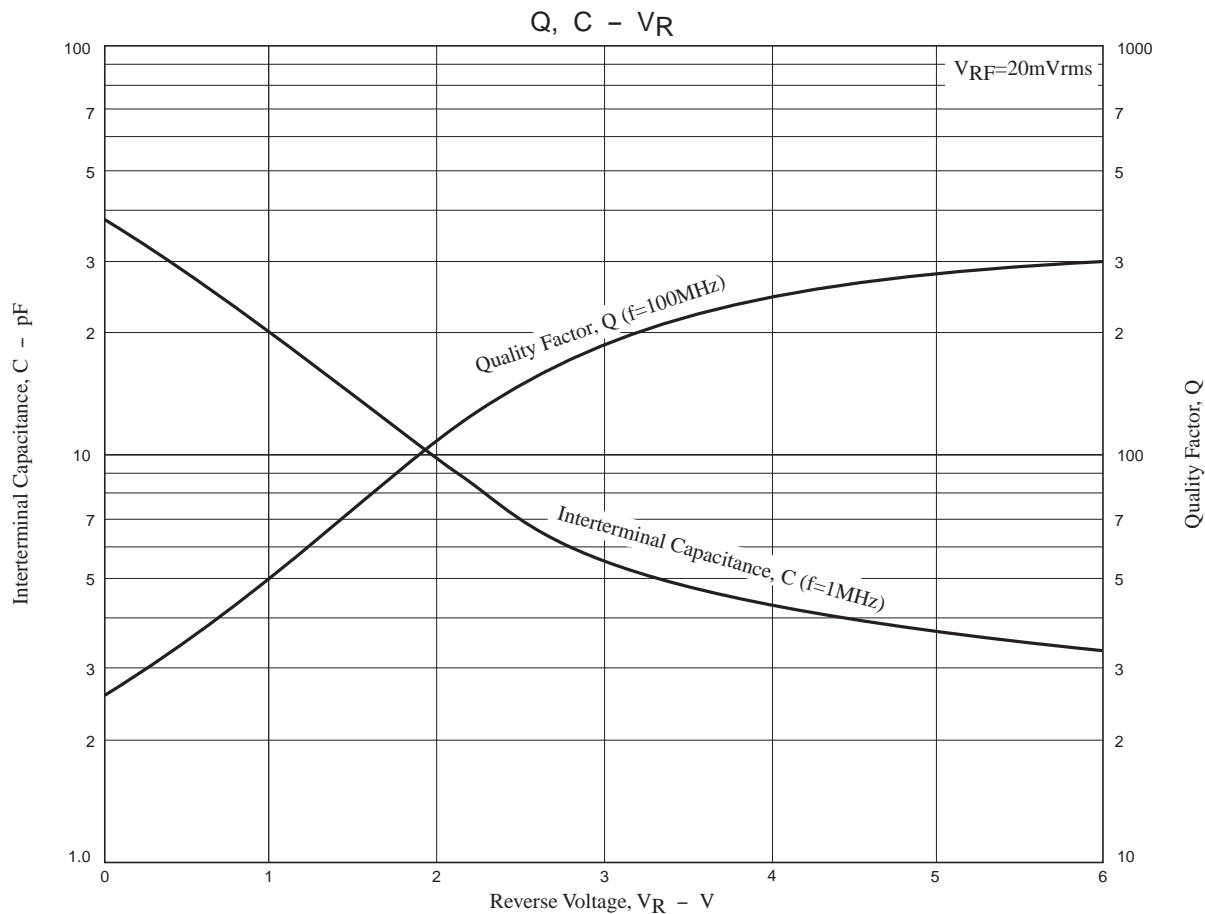
SVC710

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	V(BR)R	I <sub>R</sub> =10μA	15			V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =15V			20	nA
Interterminal Capacitance*	C <sub>1.0V</sub>	V <sub>R</sub> =1.0V, f=1MHz	18.5		21.5	pF
	C <sub>4.0V</sub>	V <sub>R</sub> =4.0V, f=1MHz	3.5		4.8	pF
Series Resistance	r <sub>s</sub>	V <sub>R</sub> =1.0V, f=100MHz		1.6		Ω
Capacitance Ratio	C <sub>R</sub>	C <sub>1.0V</sub> / C <sub>4.0V</sub>		4.8		

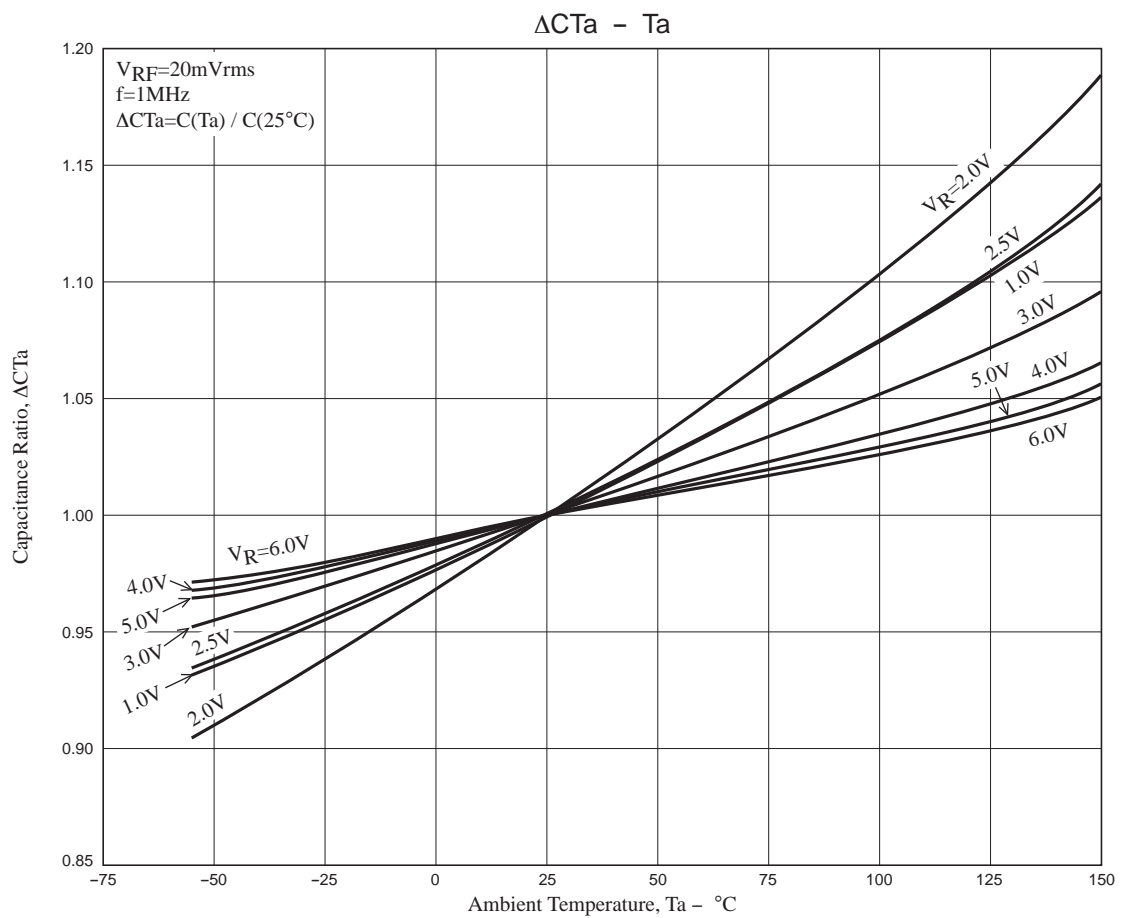
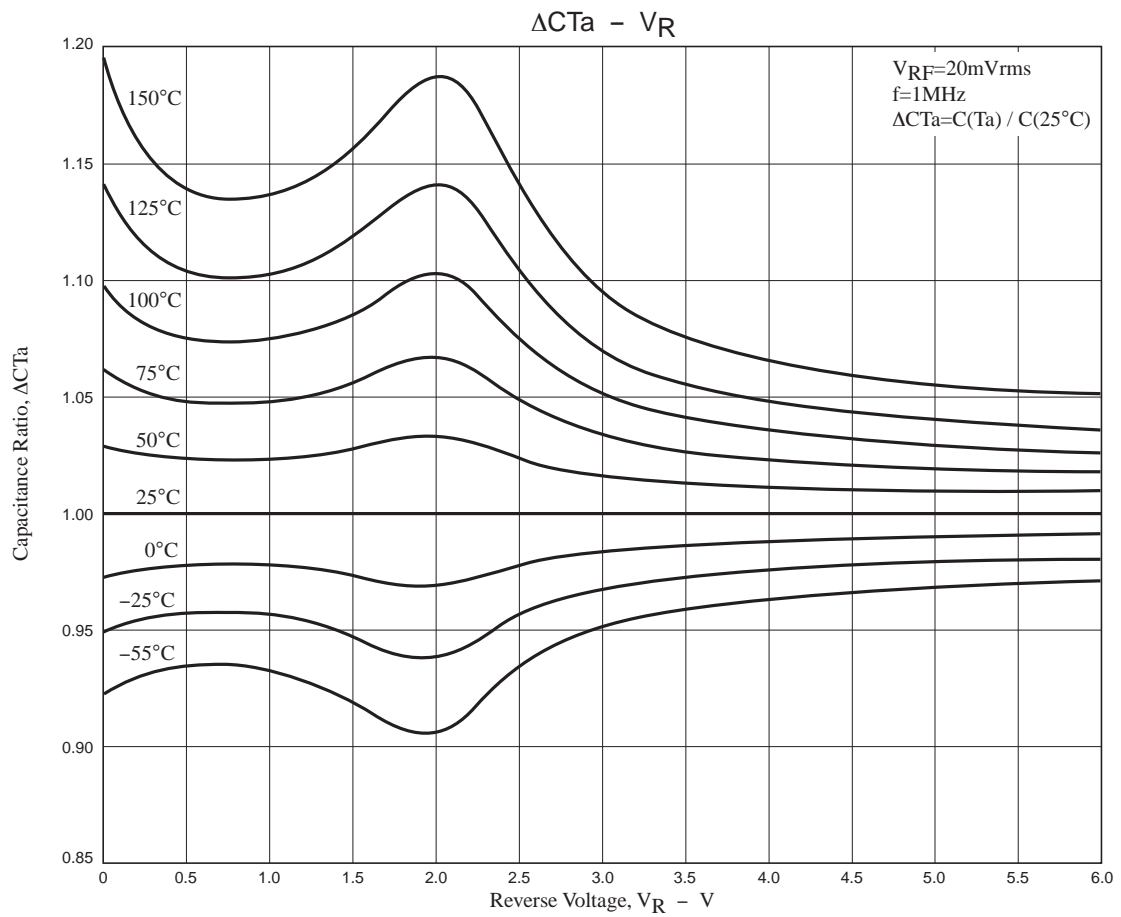
Ordering Information

Device	Package	Shipping	memo
SVC710-TL-E	MCPH3	3,000pcs./reel	Pb Free



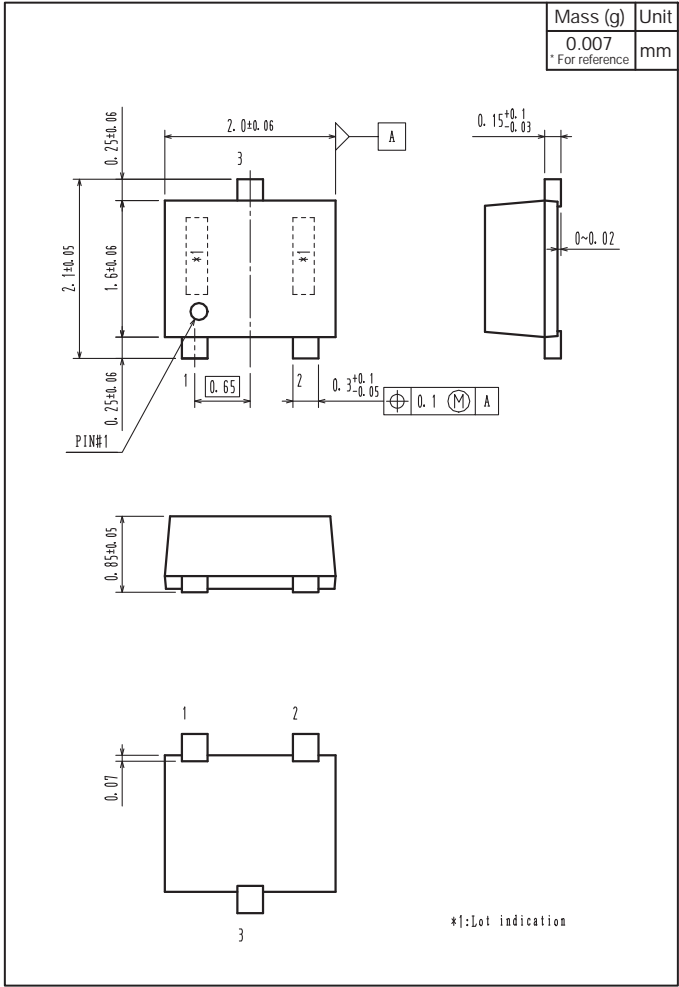
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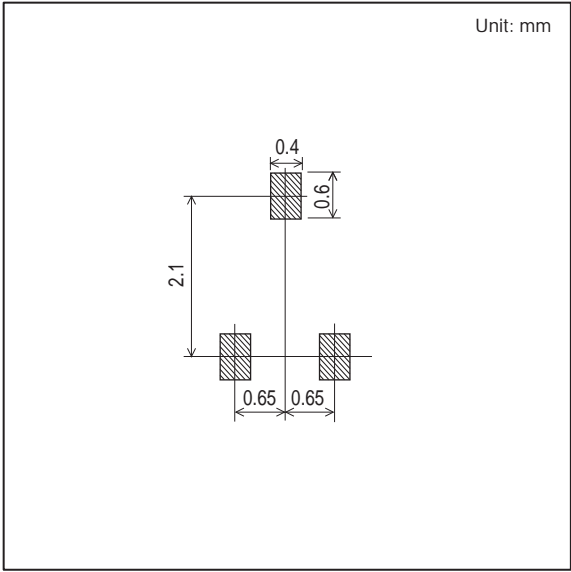




Outline Drawing  
SVC710-TL-E



Land Pattern Example



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