



ON Semiconductor®

# ON Semiconductor DATA SHEET

## SVC720 — Silicon Diffused Junction Type Varactor Diode FM Receiver Electronic Tuning Applications

### Features

- Twin type with a good linearity of C-V characteristic. Excels in large input characteristic.
- Small MCPH package permits SVC720-applied sets to be compact and slim.
- High capacitance ratio ( $V_R=1.0$  to  $4.0V$ ).
- Low series resistance.
- Low voltage drive.

### Specifications

**Absolute Maximum Ratings** at  $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	$V_R$		16	V
Junction Temperature	$T_J$		150	$^\circ C$
Storage Temperature	$T_{stg}$		-55 to +150	$^\circ C$

**Electrical Characteristics** at  $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	$V_{(BR)R}$	$I_R=10\mu A$	16			V
Reverse Current	$I_R$	$V_R=10V$			50	nA
Interterminal Capacitance*1	C1.0V	$V_R=1.0V, f=1MHz$	20.7		27.6	pF
	C4.0V	$V_R=4.0V, f=1MHz$	8.2		10.4	pF
Series Resistance	$r_s$	$V_R=1.0V, f=470MHz$		0.3		$\Omega$
Capacitance Ratio	CR	C1.0V / C4.0V	2.0			
Matching Tolerance	$\Delta C_m$	$V_R=1.0V, 4.0V, f=1MHz (C_{max}-C_{min}) / C_{min} \times 100$			3.0	%

Marking : VD

Note)\*1 : Capacitance value per each diode.

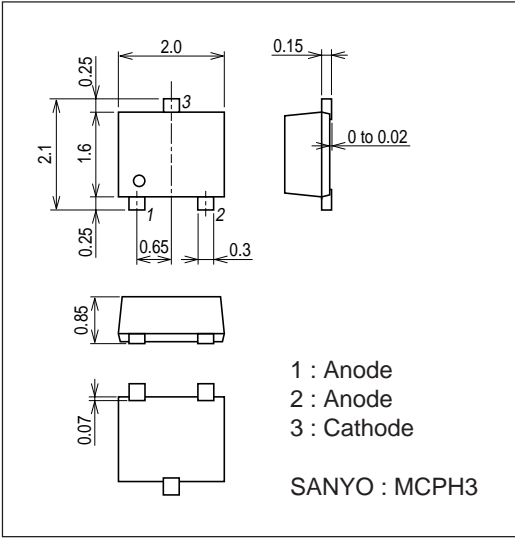
\*2 : Matching Tolerance is valid for the devices in one taping reel.

# SVC720

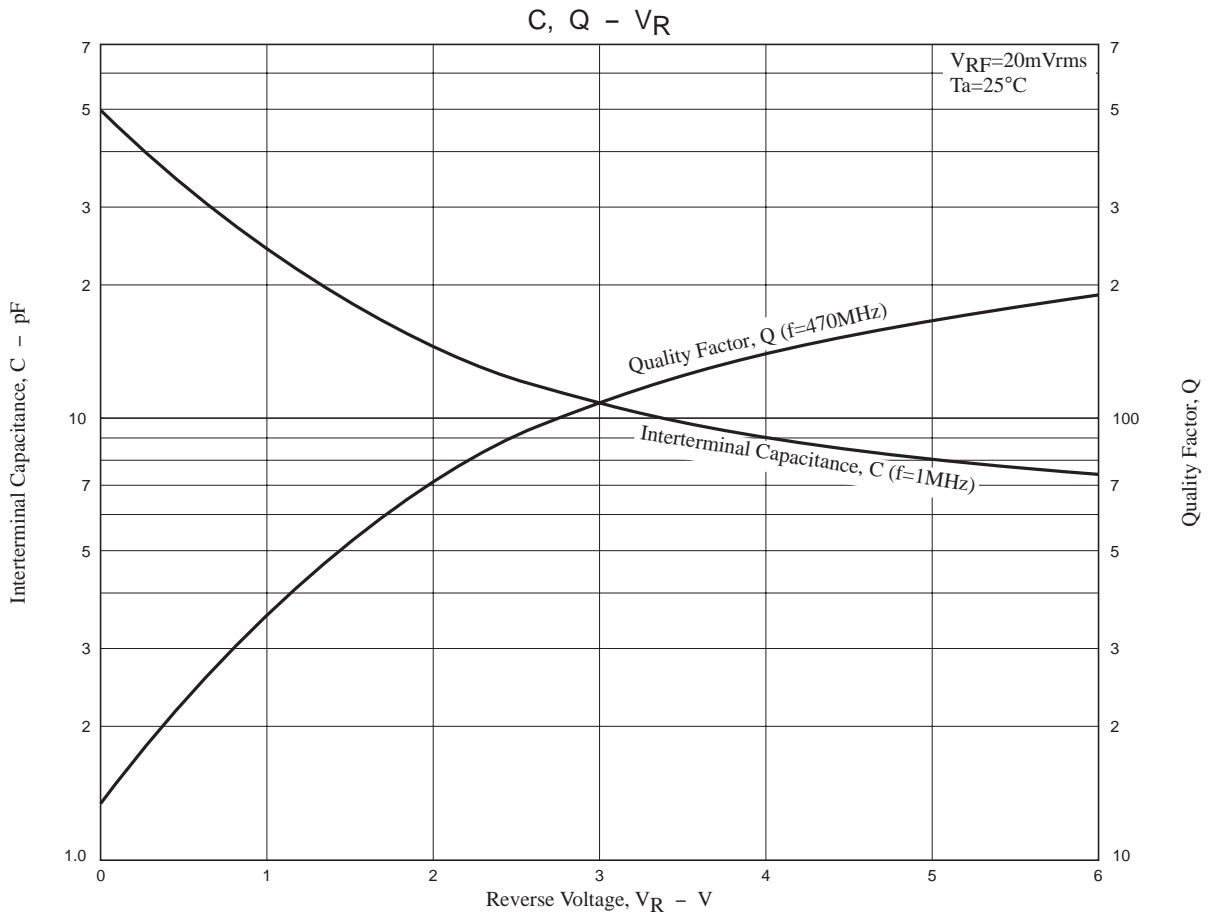
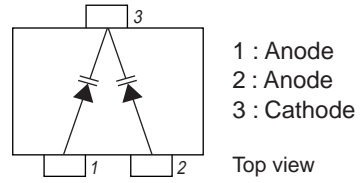
## Package Dimensions

unit : mm (typ)

7019A-002

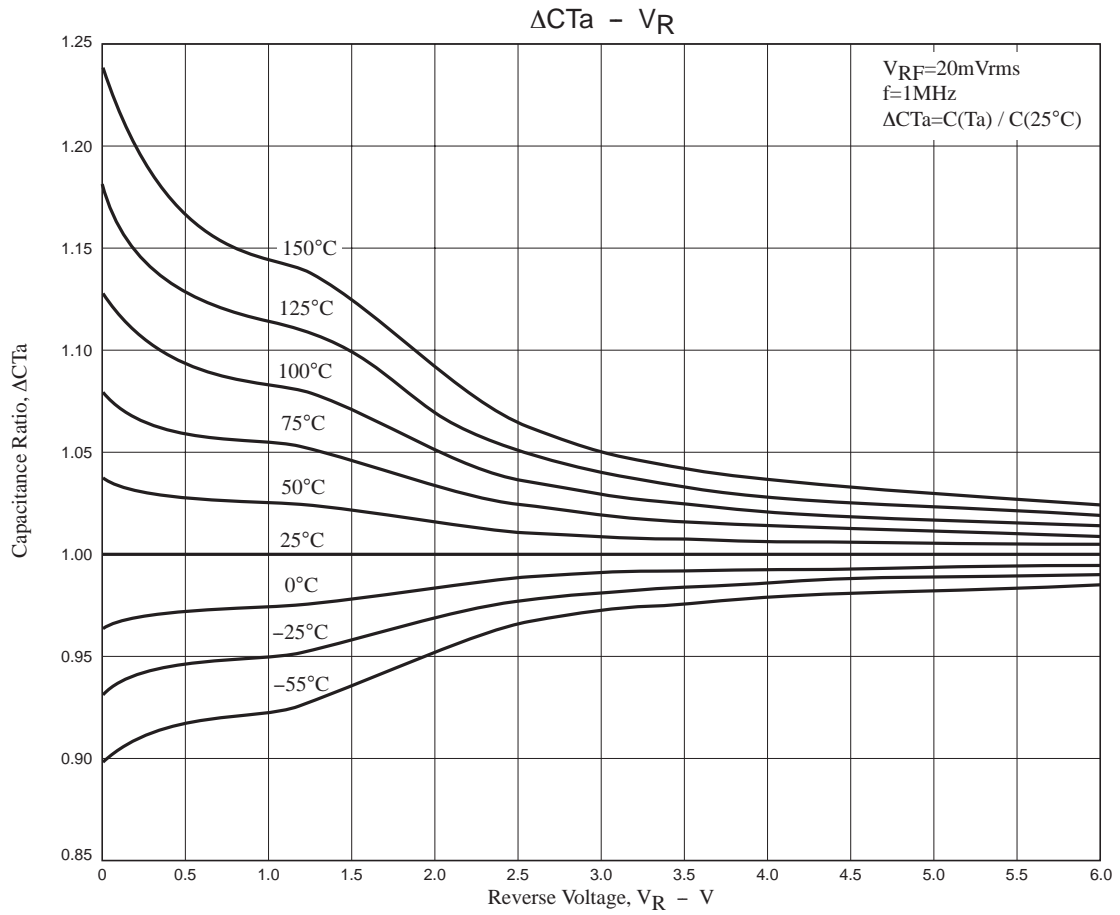


## Electrical Connection

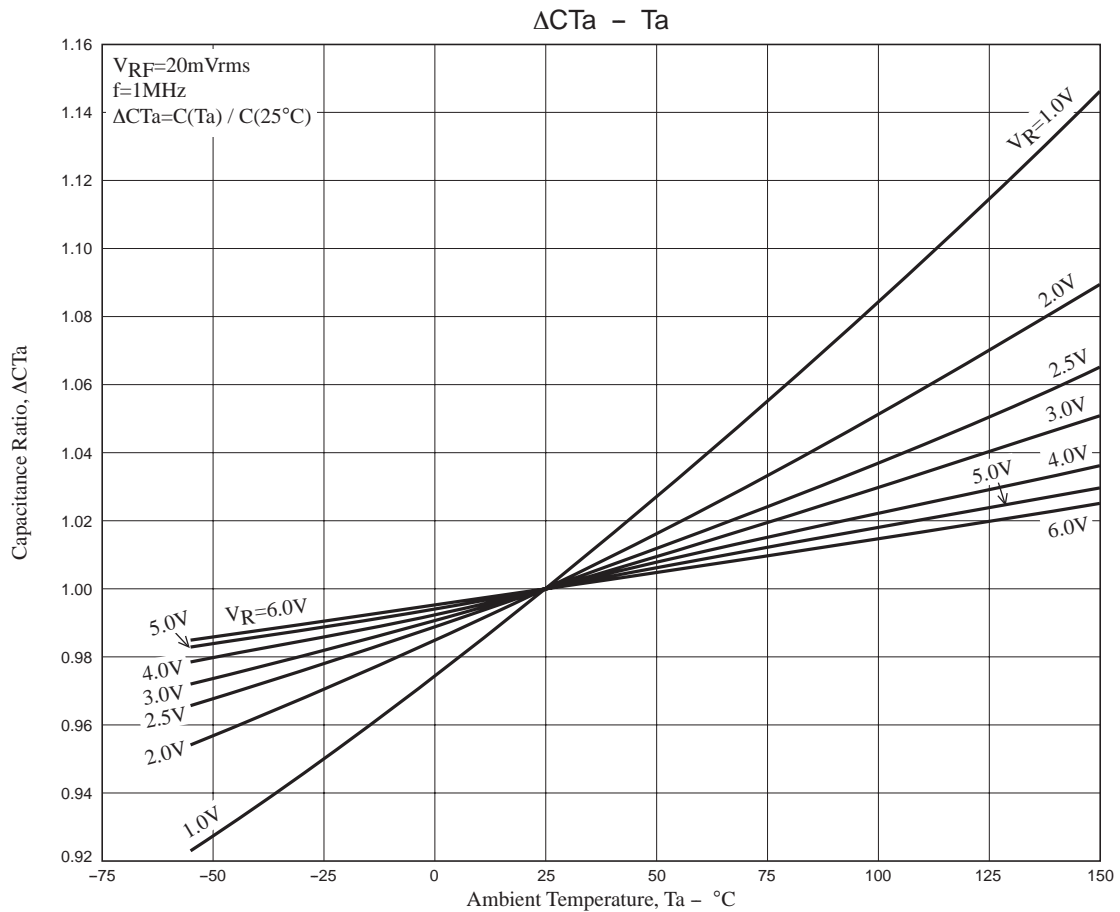


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# SVC720



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