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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		Ω
Capacitance Ratio	CR	C1.0V / C4.0V	2.0			
Matching Tolerance	ΔC_m	$V_R=1.0V, 4.0V, f=1MHz (C_{max}-C_{min}) / C_{min} \times 100$			3.0	%

Marking : VD

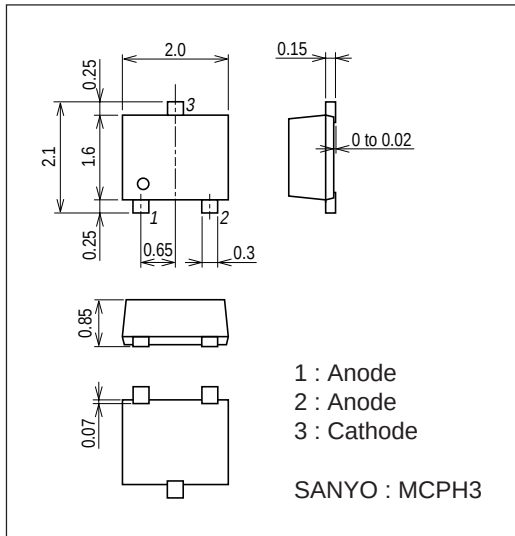
Note)*1 : Capacitance value per each diode.

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

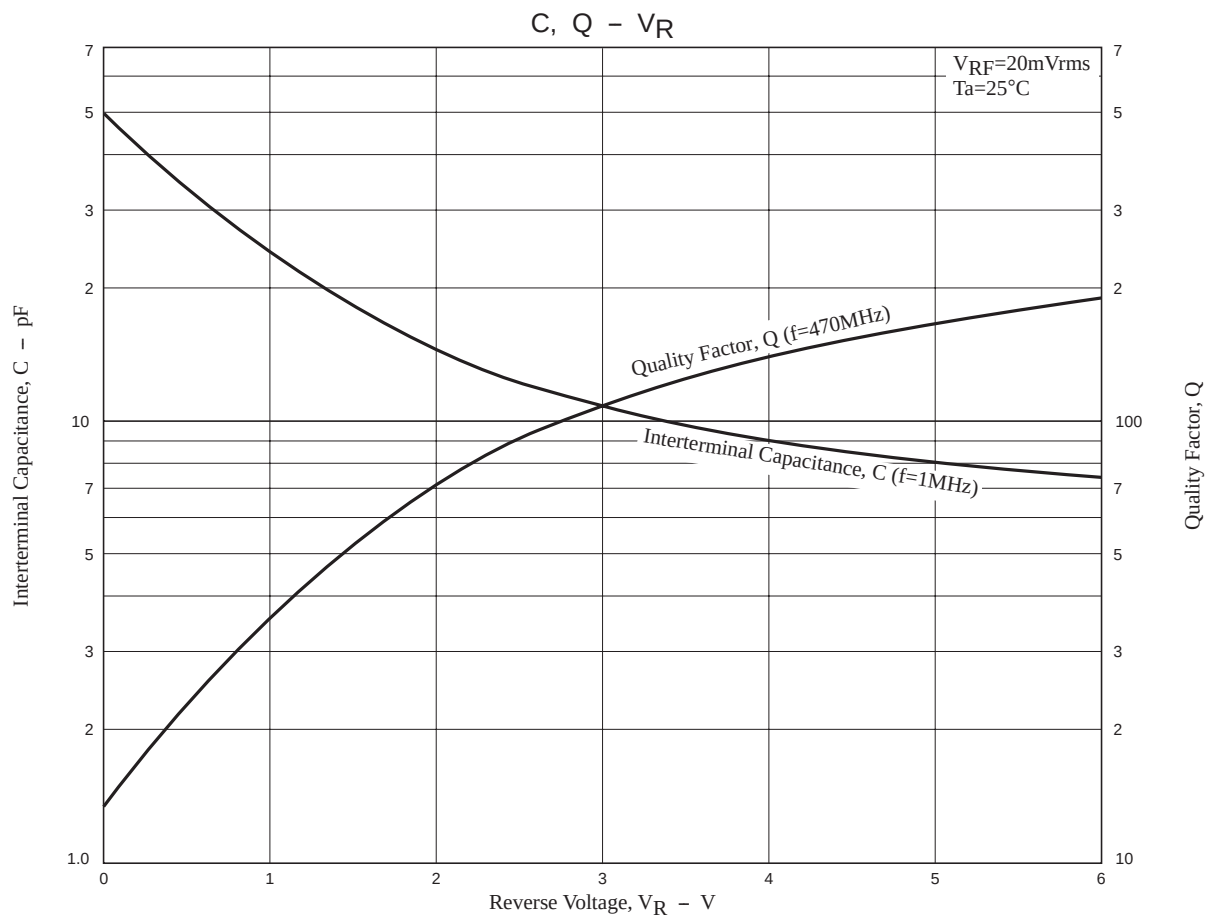
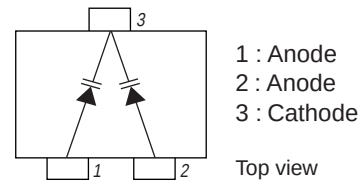
Package Dimensions

unit : mm (typ)

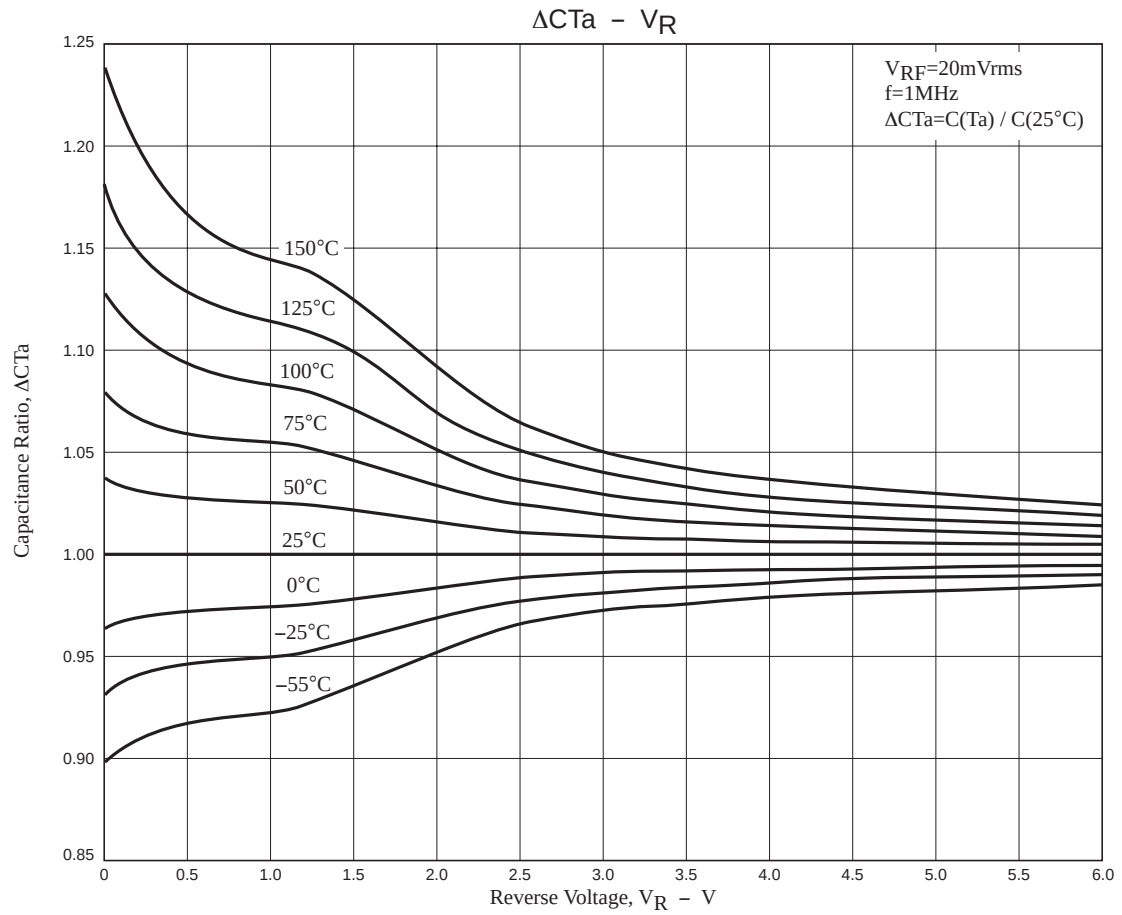
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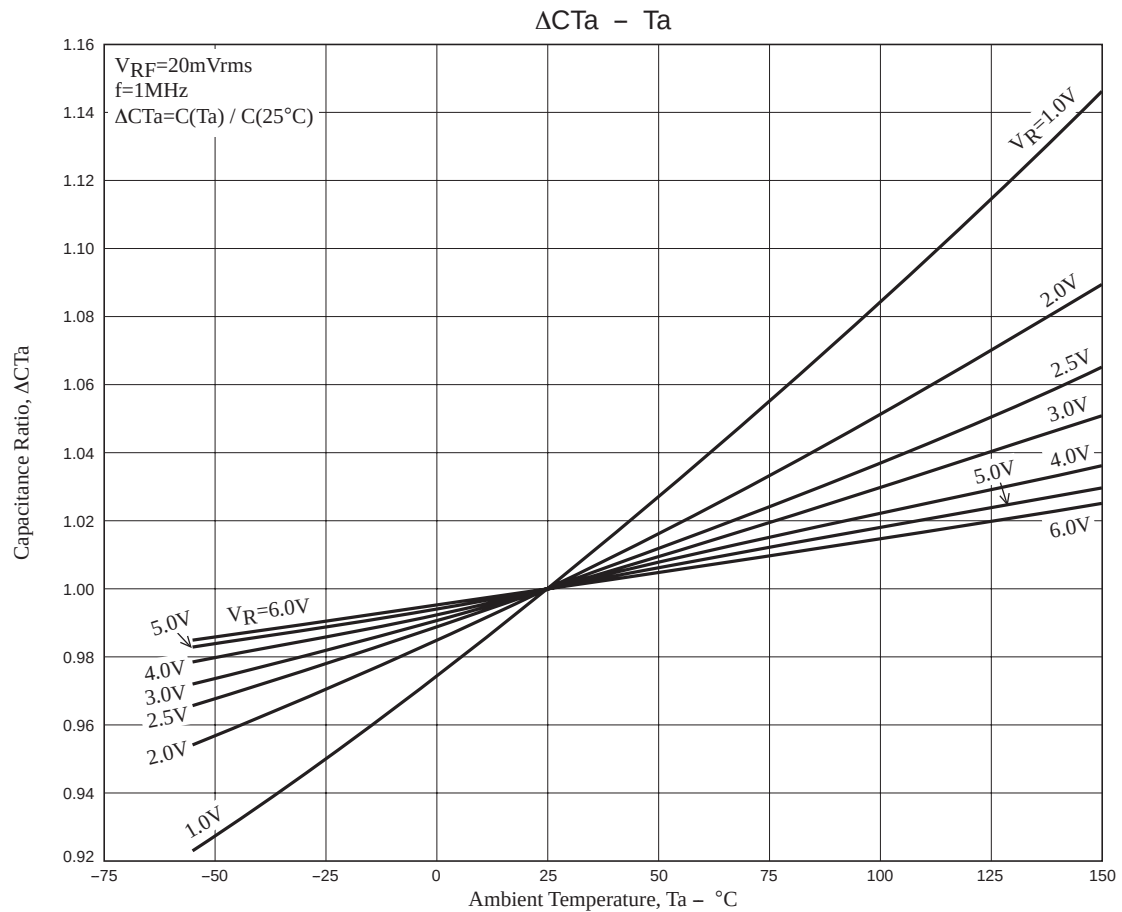
Electrical Connection



IT13734



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