



ON Semiconductor®

ON Semiconductor DATA SHEET

SVC251SPA — Diffused Junction Type Silicon Diode Varactor Diode for AFC, CB PLL

Features

- The SVC251SPA is a varactor diode of hyper abrupt junction structure fabricated with ion implantation technology. It is intended for use in AFC, CB PLL VCO cicuitry
- High Q
- High capacitance ratio

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V_R		12	V
Junction Temperature	T_j		100	°C
Storage Temperature	T_{stg}		-55 to +100	°C

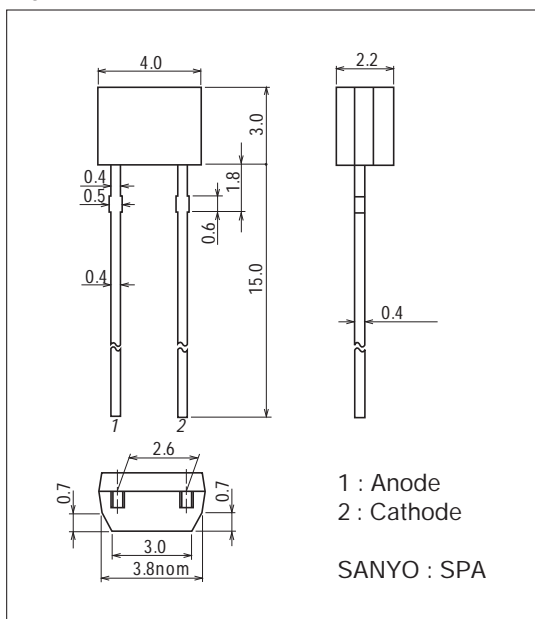
Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	$V_{(BR)R}$	$I_R=10\mu A$	12			V
Reverse Current	I_R	$V_R=9V$			200	nA
Interterminal Capacitance	$C_{1.6V}$	$V_R=1.6V, f=1MHz$	23		38	pF
	$C_{5.0V}$	$V_R=5.0V, f=1MHz$	11		19	pF
Capacitance Ratio	CR	$C_{1.6V}/C_{5.0V}$	1.7			
Series Resistance	r_s	$f=50MHz, V_R=1V$			0.6	Ω

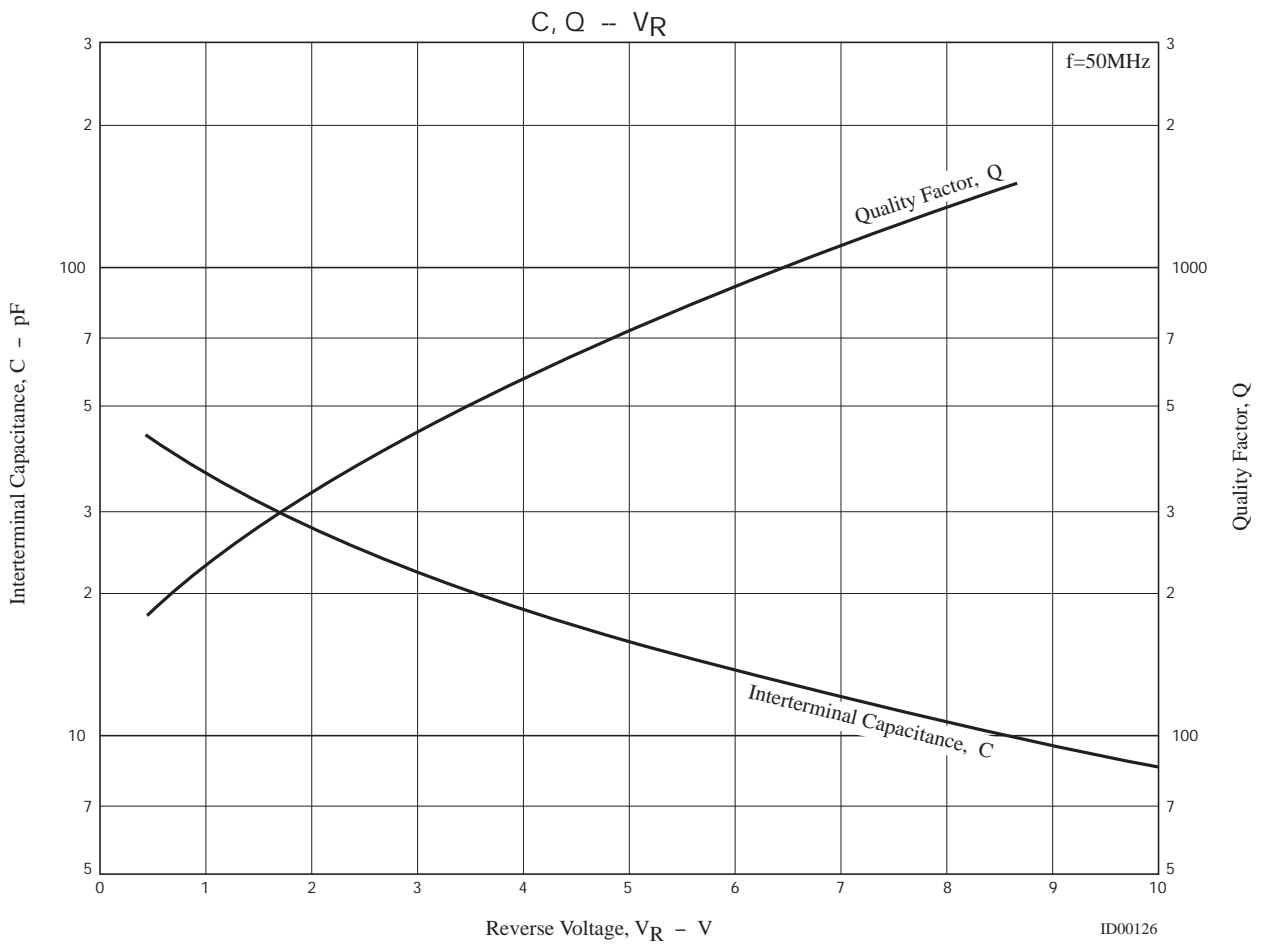
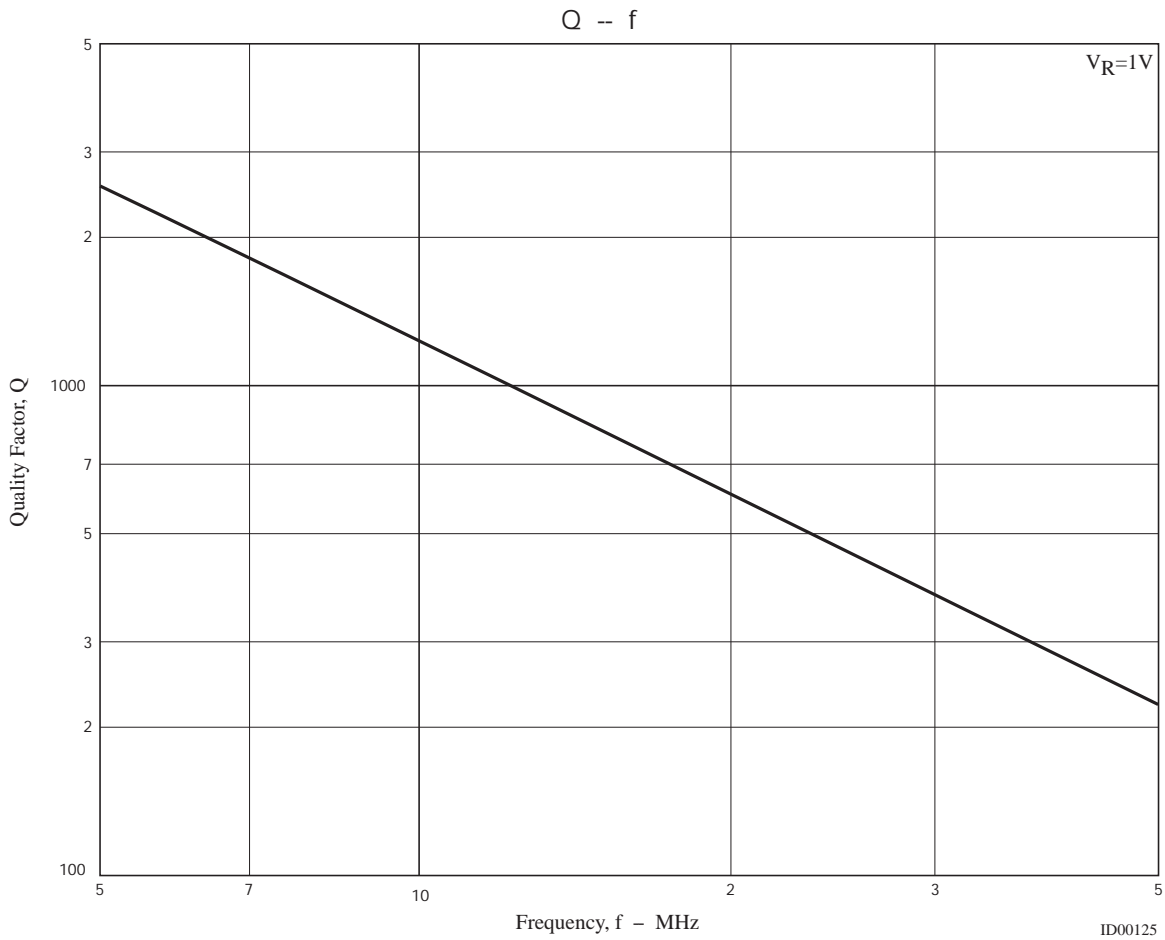
Package Dimensions

unit : mm (typ)

1184

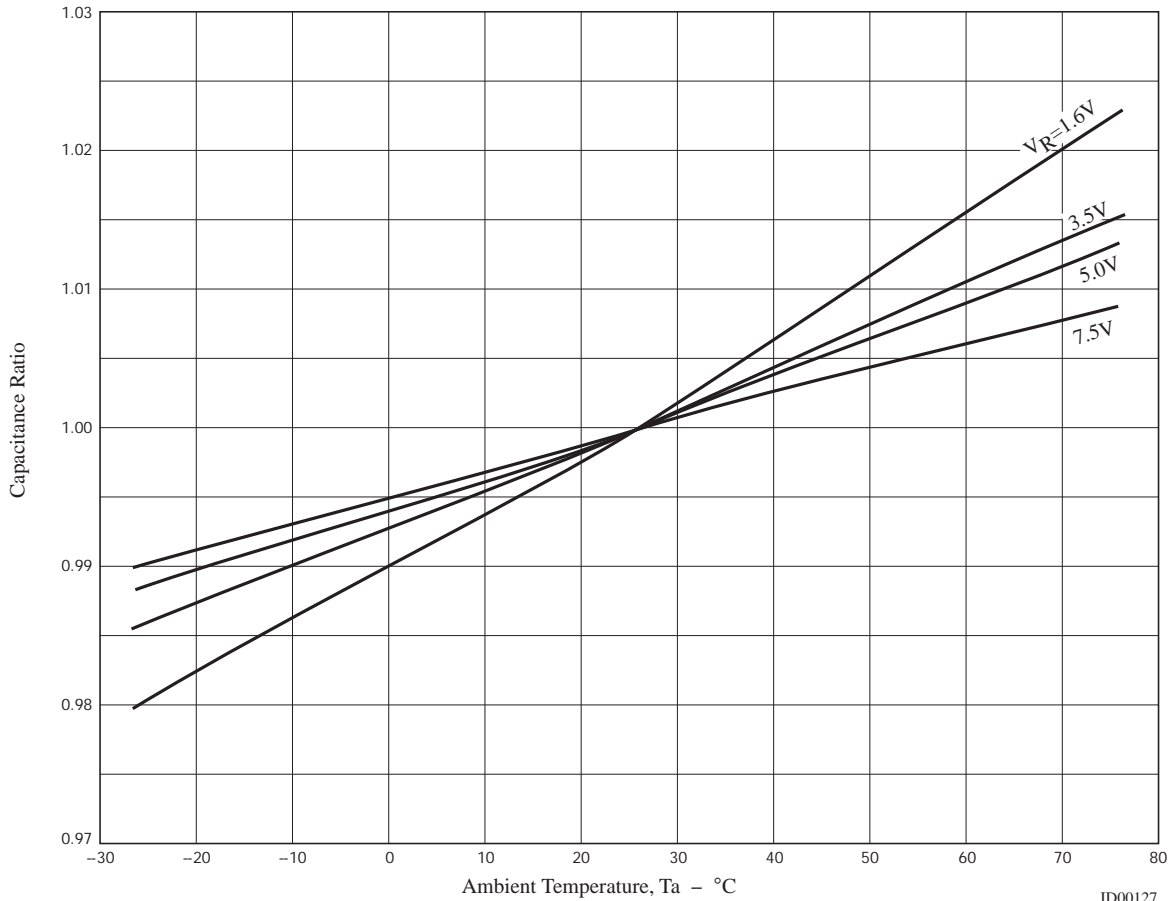


SVC251SPA



SVC251SPA

C -- Ta



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