

Ordering number :EN5345



SVC344

Silicon Diffused Junction Type
Varactor Diode

for AM Low-Voltage Electronic Tuning

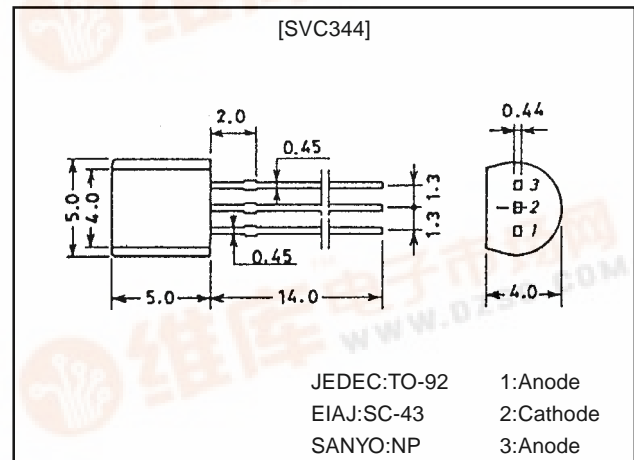
Features

- Twin type varactor diode for low-voltage AM electronic tuning applications.
- Low operating voltage ($\leq 4.5V$).
- High Q.

Package Dimensions

unit:mm

1271



Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V_R		30	V
Junction Temperature	T_J		125	$^\circ C$
Storage Temperature	T_{stg}		-55 to +125	$^\circ C$

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

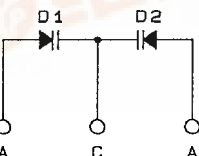
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	$V_{(BR)R}$	$I_R=10\mu A$	30			V
Reverse Current	I_R	$V_R=20V$			100	nA
Interterminal Capacitance*1	$C_{1.0V}$	$V_R=1.0V, f=1MHz*2$	410.0	430.0	445.0	pF
	$C_{3.0V}$	$V_R=3.0V, f=1MHz$	70.0	95.0	120.0	pF
	$C_{4.5V}$	$V_R=4.5V, f=1MHz$	210.0	23.5	26.0	pF
Quality Factor	Q	$V_R=1.0V, f=1MHz$	200			
Capacitance Ratio	CR	$C_{1.0V}/C_{4.5V}$	15.0			
Matching Tolerance*3	ΔC_{m1}	$V_R=1.0V, f=1MHz$			2.0	%
	ΔC_{m2}	$V_R=3.0V, f=1MHz$			3.0	%
	ΔC_{m3}	$V_R=4.5V, f=1MHz$			3.0	%

Note)*1:The value of interterminal capacitance represent the average of mesurements for tow elements.

Note)*2:1MHz signal:20mVrms

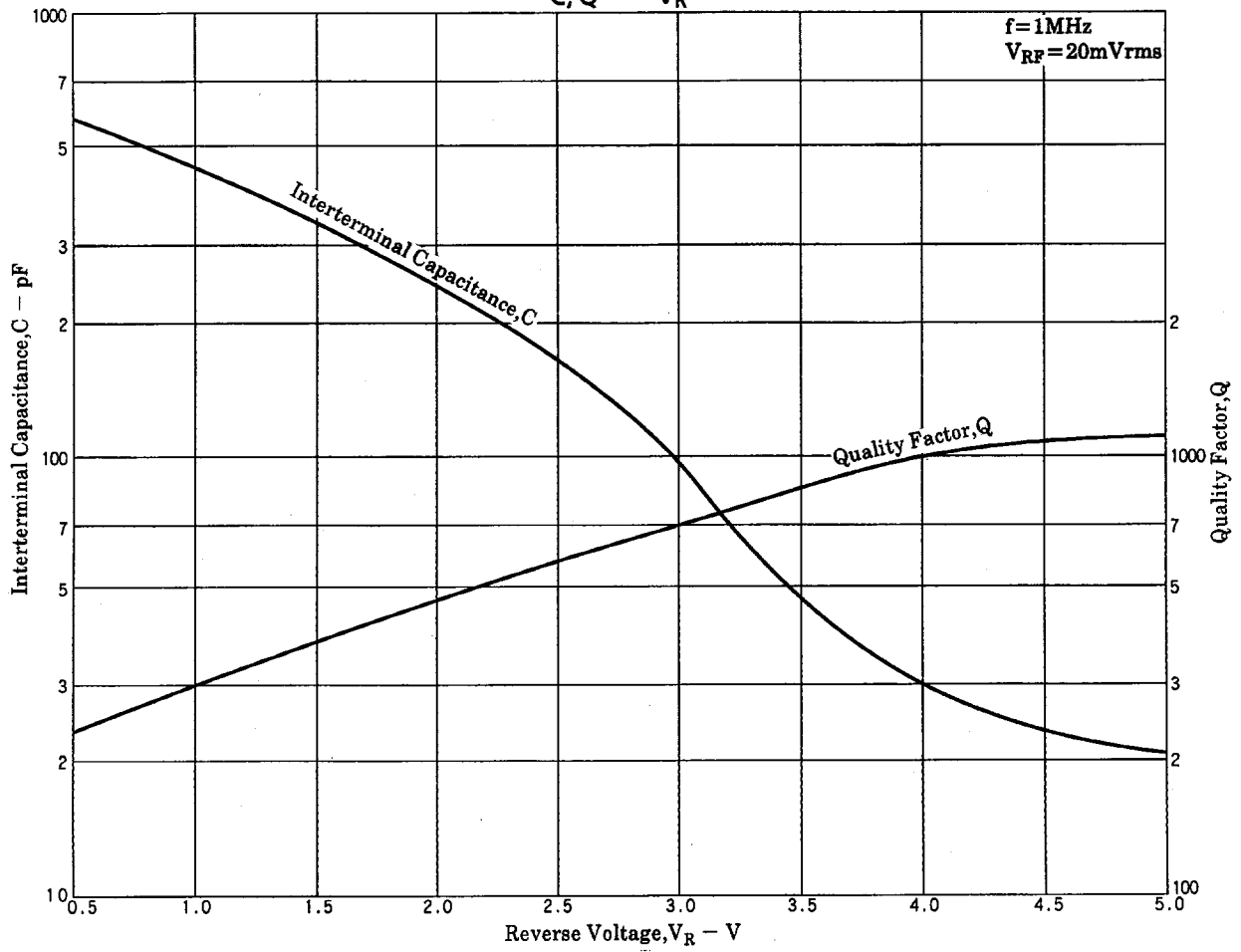
Note)*3: $\Delta C_m=(C_{max}-C_{min})/C_{min} \times 100$ Between D1 and D2

Electrical Connection

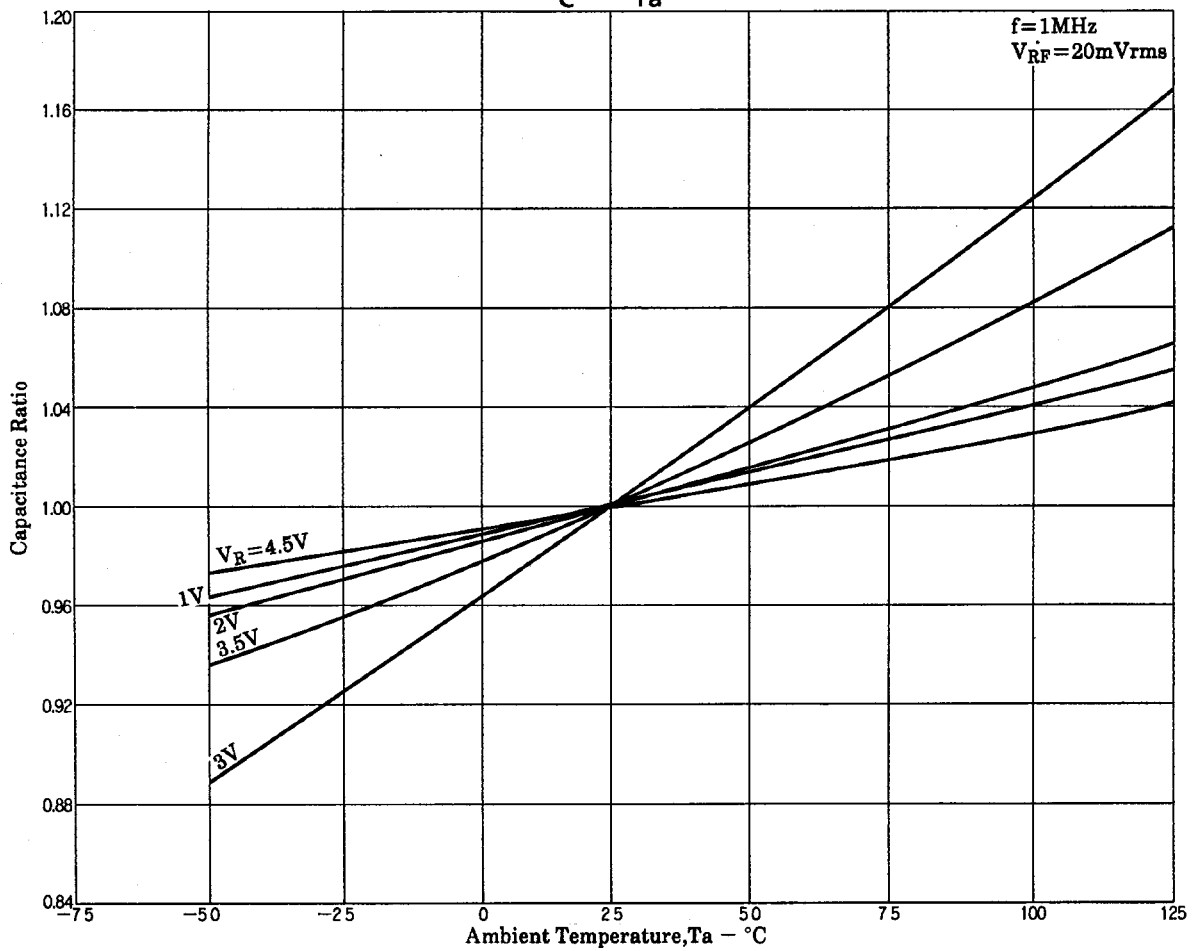


SVC344

C, Q - V_R



C - T_a



- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.