Ordering number :EN4275A



**SVC364** 

**Diffused Junction Type Sillicon Diode** 

# Composite Varactor Diode for AM Receiver **Low-Voltage Electronic Applications**

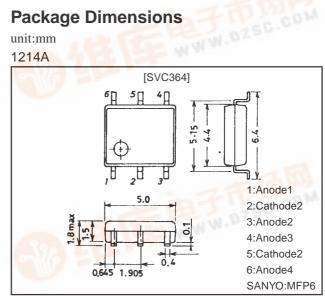
### **Features**

- · Excellent matching characteristics because of composite type.
- · Manufacturing processes reducible and automatic mounting supported.
- · High capacitance ratio and high quality factor.
- · Cathodes separated in RF and OSC.
- · Tape reel packaging.
- · Surface mount type.

### **Package Dimensions**

unit:mm

1214A



## **Specifications**

#### Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V <sub>R</sub>		16	V
Junction Temperature	Tj		125	°C
Storage Temperature	Tstg	and Cale Cale	-55 to +125	°C

### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions		Ratings		
	Symbol		min	typ	max	Unit
Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =10μA	16			V
Reverse Current (One diode)	IR	V <sub>R</sub> =9V			100	nA
Interterminal Capacitance (Average)	C <sub>1V</sub>	V <sub>R</sub> =1V, f=1MHz*1	428.0*		500.0*	pF
	C <sub>6V</sub>	V <sub>R</sub> =6V, f=1MHz		52.0		pF
	C <sub>8V</sub>	V <sub>R</sub> =8V, f=1MHz	20.5		27.0	pF
Quality Factor	Q	V <sub>R</sub> =1V, f=1MHz	200	1 5		77
Capacitance Ratio	CR	C <sub>1V</sub> /C <sub>8V</sub>	17.5		24.5	:0
Matching Tolerance	ΔC <sub>m</sub> *2	V <sub>R</sub> =1V to 8V, f=1MHz		41.07	±2.5	%

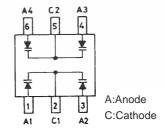
Note)\*1:1MHz signal:20mVrms.

Note)\*2: $\Delta C_m = (C_{Dn} - C_{D3}) / C_{D3} \times 100$ 

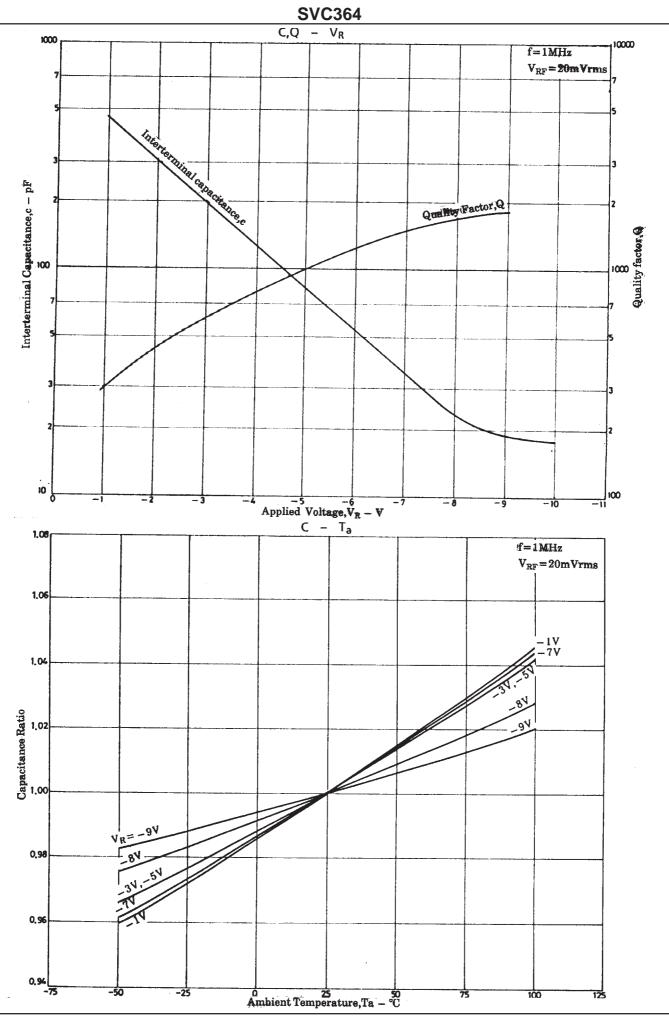
Note)\*:The SVC364 is classified by C<sub>1V</sub> as follows: WWW.DZSC

Rank	C <sub>1V</sub> (pF)	
K	428.0 to 456.5	
L	447.5 to 478.0	
M	468.5 to 500.0	

#### **Electrical Connection**







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