

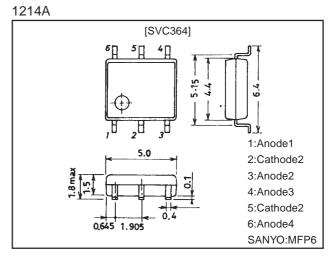
Diffused Junction Type Sillicon Diode Composite Varactor Diode for AM Receiver Low-Voltage Electronic Applications

## 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.
- $\cdot$  Surface mount type.

## **Package Dimensions**

unit:mm



**SVC364** 

# **Specifications**

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

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	VR		16	V
Junction Temperature	Tj		125	°C
Storage Temperature	Tstg		-55 to +125	°C

### Electrical Characteristics at Ta = 25°C

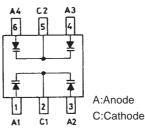
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	V(BR)R	I <sub>R</sub> =10μA	16			V
Reverse Current (One diode)	IR	V <sub>R</sub> =9V			100	nA
Interterminal Capacitance (Average)	C <sub>1V</sub>	V <sub>R</sub> =1V, f=1MHz*1	428.0*		500.0*	pF
	C <sub>6V</sub>	V <sub>R</sub> =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			[
Capacitance Ratio	CR	C <sub>1V</sub> /C <sub>8V</sub>	17.5		24.5	
Matching Tolerance	∆C <sub>m</sub> *2	V <sub>R</sub> =1V to 8V, f=1MHz			±2.5	%
•	-		17.5		-	

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

Note)\*2: $\Delta C_m = (C_{Dn} - C_{D3}) / C_{D3} \times 100$ Note)\*:The SVC364 is classified by  $C_{1V}$  as follows:

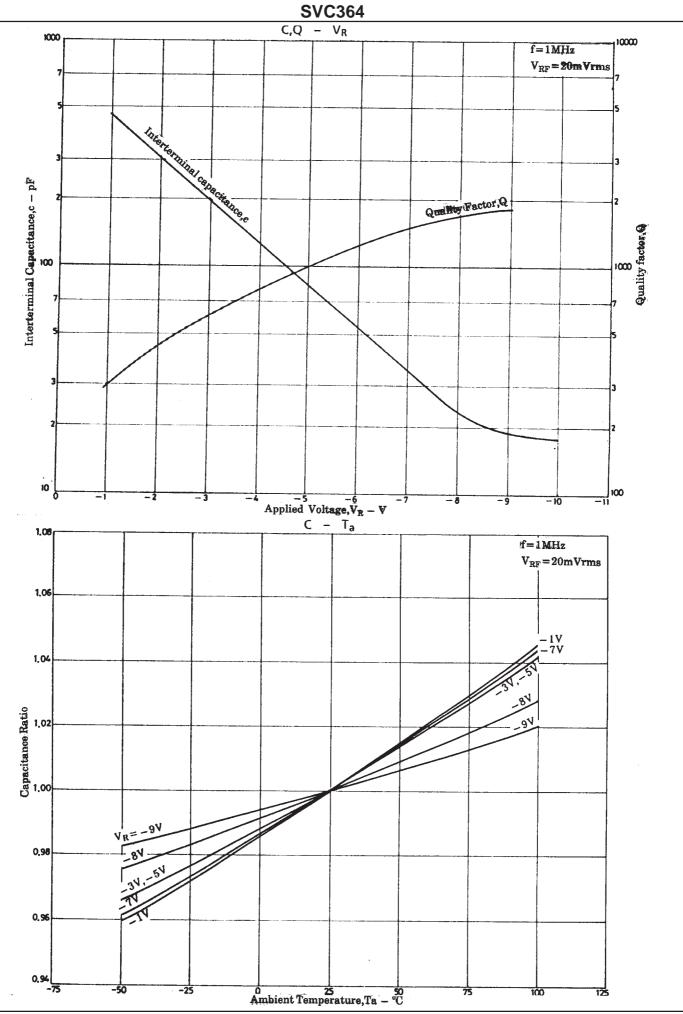
Rank	C <sub>1V</sub> (pF)	
K	428.0 to 456.5	
L	447.5 to 478.0	
М	468.5 to 500.0	

#### **Electrical Connection**



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33098HA (KT)/92794MO/8-8099/3202HK No.4275-1/3



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