

TUNING VARACTORS

30-VOLT SOT SILICON TUNING VARACTORS

FEATURES

- Low Inductance
- Uniform Swing
- Superior Reproducibility
- High Q
- SOT-23 Surface Mount Package
- Low Cost

DESCRIPTION

Suitable for general purpose frequency control and tuning applications through 250 MHz. The surface mount package is ideal for automated production.

Tape and Reel available upon request.

SYMBOL	PARAMETER	VALUE	UNITS
Vr	Reverse Voltage	30	Volts
If	Forward Current	200	mA
Pd	Power Dissipation	280	mW
	@Ta = 25°C Derate above 25°C	2.8	mW/°C
Tj	Maximum Junction Temperature	+125	°C
Tstg	Storage Temperature	-55 to +150	°C

ABSOLUTE MAXIMUM RATINGS

T_A = 25°C

MODEL NUMBER	C _t (pF) DIODE CAPACITANCE F=1 MHz Vr=4V	T _r TUNING RATIO C(2)/C(30)	Q Vr=4V F=50 MHz	V _{BR} (Vdc) I _r =10µa	I _r (nAdc) Vr=28V	PERFORMANCE CURVES See Note 1
	MIN/TYP/MAX	MIN/TYP/MAX	TYP	MIN	MAX	
KV30S1	6.1/6.8/7.5	2.5/2.7/3.2	450	30	100	A
KV30S3	9.0/10.0/11.0	2.5/2.9/3.2	400	30	100	C
KV30S4	10.8/12.0/13.2	2.5/2.9/3.2	400	30	100	D
KV30S5	13.5/15.0/16.5	2.5/2.9/3.2	400	30	100	E
KV30S6	16.2/18.0/19.8	2.5/2.9/3.2	350	30	100	F
KV30S7	19.8/22.0/24.2	2.5/2.9/3.2	350	30	100	G
KV30S8	24.3/27.0/29.7	2.5/2.9/3.2	300	30	100	H
KV30S9	29.7/33.0/36.3	2.5/2.9/3.2	200	30	100	I

Note 1: Performance curves on following page.

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PACKAGED TUNING VARACTORS

PERFORMANCE CURVES

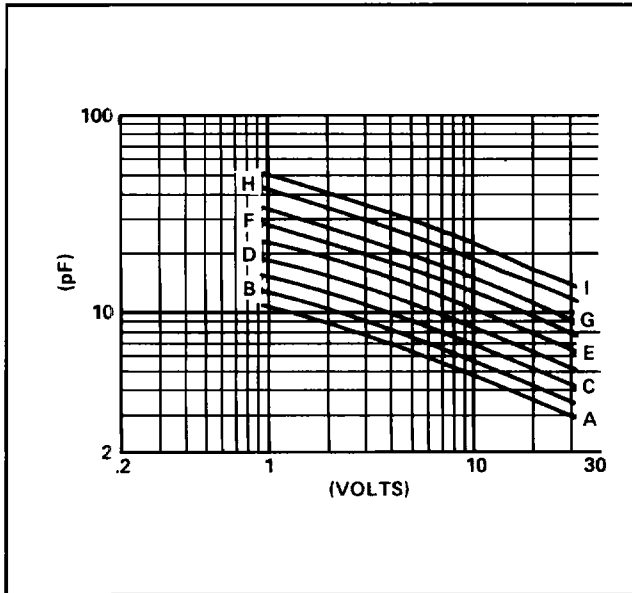


Figure 1. Typical Capacitance vs. Voltage Curves

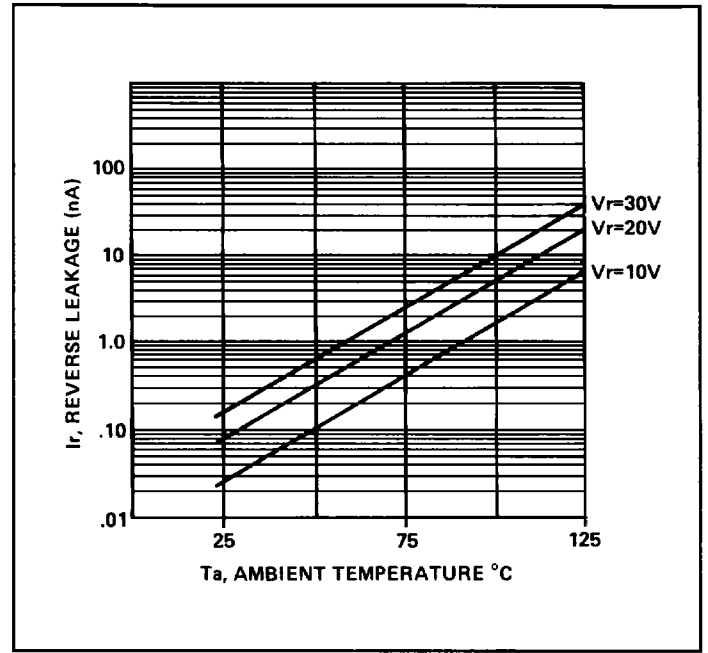


Figure 3. Reverse Leakage vs. Temperature

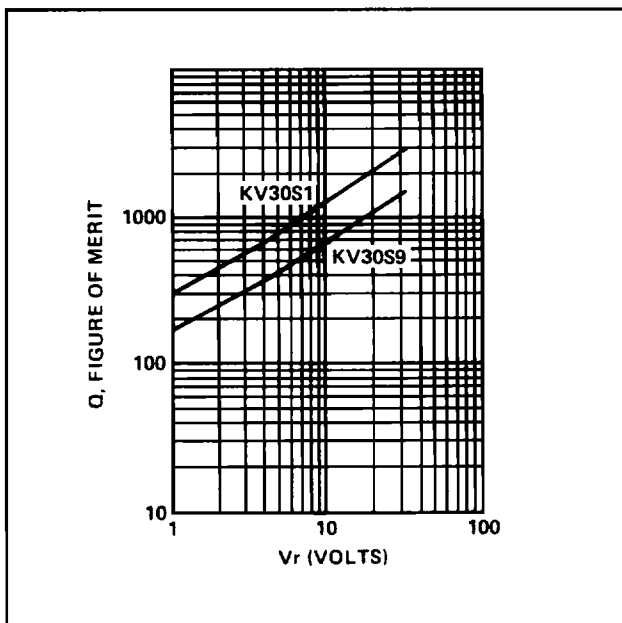


Figure 2. Q vs. Reverse Voltage

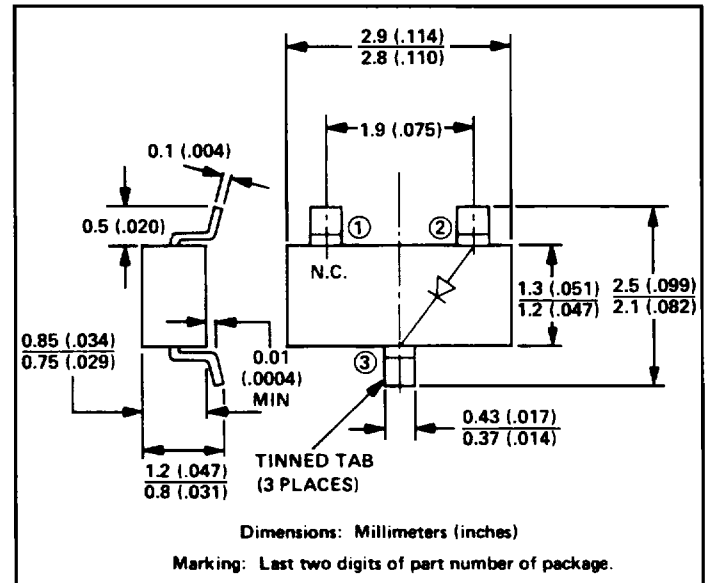


Figure 4. Package Outline Drawing