

## 20 VOLT AXIAL LEADED ABRUPT JUNCTION VARACTOR DIODES

- High Q and High Tuning Ratio
- Guaranteed Tuning Ratio and Temperature
- Superior Reproducibility
- High Reliability  
(state-of-the-art passivation plus hermetic packaging)
- For Economy Applications

### ELECTRICAL SPECIFICATIONS: $T_A=25^\circ\text{C}$

$C_T^{**}$ DIODE CAPACITANCE (pF) $\pm 10\%$ @ $V_R=4\text{dc}, f=1\text{MHz}$	MODEL NUMBER	Q, FIGURE OF MERIT $V_R=4\text{dc},$ $f=50\text{MHz}$ MIN	$T_R$ TUNING RATIO $C_2 / C_{20},$ $f=1\text{MHz}$ MIN** / TYP / MAX**	PACKAGE *	
6.8	KV620	300	2.0 / 2.5 / 3.2	DO-7	
8.2	KV622	300	2.0 / 2.5 / 3.2	DO-7	
10	KV624	300	2.0 / 2.5 / 3.2	DO-7	
12	KV626	300	2.0 / 2.6 / 3.2	DO-7	
15	KV628	250	2.0 / 2.6 / 3.2	DO-7	
18	KV630	250	2.0 / 2.6 / 3.2	DO-7	
20	KV632	250	2.0 / 2.6 / 3.2	DO-7	
22	KV634	250	2.0 / 2.6 / 3.2	DO-7	
27	KV636	200	2.0 / 2.6 / 3.2	DO-7	
33	KV638	200	2.0 / 2.6 / 3.2	DO-7	
39	KV640	200	2.0 / 2.6 / 3.2	DO-7	
47	KV642	200	2.0 / 2.6 / 3.2	DO-7	
56	KV644	150	2.0 / 2.6 / 3.2	DO-7	
68	KV646	150	2.0 / 2.6 / 3.2	DO-7	
82	KV648	150	2.0 / 2.6 / 3.2	DO-7	
100	KV650	150	2.0 / 2.6 / 3.2	DO-7	
120	KV652	100	2.0 / 2.6 / 3.2	DO-14	
150	KV654	100	2.0 / 2.6 / 3.2	DO-14	
180	KV656	80	2.0 / 2.6 / 3.2	DO-14	
200	KV658	80	2.0 / 2.6 / 3.2	DO-14	
220	KV660	60	2.0 / 2.6 / 3.2	DO-14	
PARAMETER	TEST CONDITIONS	UNIT	MIN	TYP	MAX
REVERSE BREAKDOWN VOLTAGE ( $V_{BR}$ )	$I_R=10\text{mA dc}$	Vdc	20	25	—
REVERSE LEAKAGE CURRENT ( $I_R$ )	$V_R=15\text{V dc}$	$\mu\text{A dc}$	—	—	0.1
SERIES INDUCTANCE ( $L_S$ )	$f=250\text{ MHz}, L=1/16"$	nH	—	5	—
CASE CAPACITANCE ( $C_C$ )	$f=1\text{ MHz}, L=1/16"$	pF	—	0.25	—
DIODE CAPACITANCE TEMP COEFFICIENT ( $TC_C$ )	$V_R=4\text{dc}, f=1\text{MHz}$	$\text{ppm}/^\circ\text{C}$	—	300	500
MAXIMUM RATINGS					
PARAMETER	VALUE	UNIT			
REVERSE VOLTAGE	20	Vdc			
DEVICE DISSIPATION @ $T_A=25^\circ\text{C}$	400	mW			
DERATE ABOVE $25^\circ\text{C}$	2.67	mW/ $^\circ\text{C}$			
OPERATING JUNCTION TEMP RANGE	+175	$^\circ\text{C}$			

\*Other Package Styles Available