

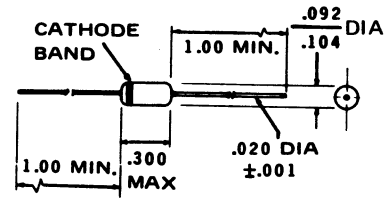


KEVICAP TUNING DIODES

ABRUPT JUNCTION JEDEC REGISTERED

IN5139,A thru IN5148,A
IN5441A,B,C thru IN5456A,B,C
IN5461A,B,C thru IN5476A,B,C

- HIGH Q AND HIGH TUNING RATIO
- GUARANTEED TUNING RATIO AND TEMP. COEFF.
- SUPERIOR REPRODUCIBILITY – 100% Tested for Capacitance with Swept Bias Instead of Older Two-Point Techniques
- HIGH RELIABILITY – State of the-Art Passivation Plus Hermetic Packaging



DO-7 GLASS PACKAGE

ELECTRICAL CHARACTERISTICS (T_A = 25° C unless otherwise noted)

	TYPE	Q, Figure of Merit V _R = 4 Vdc, f = 50 MHz		TR, Tuning Ratio C ₂ /C ₃₀ , f = 1 MHz		TYPE	Q, Figure of Merit V _R = 4 Vdc, f = 50 MHz		TR, Tuning Ratio C ₂ /C ₃₀ , f = 1 MHz		TYPE	Q, Figure of Merit V _R = 4 Vdc, f = 50 MHz		TR, Tuning Ratio C ₂ /C ₃₀ , f = 1 MHz			
		MIN	TYP/MAX	MIN**	TYP/MAX		MIN**	TYP/MAX**	MIN**	TYP/MAX**		MIN**	TYP/MAX**				
C _T ** DIODE CAPACITANCE (pf) ± 10% @ V _R = 4 Vdc, f = 1 MHz	8.8	IN5139	350	2.7/2.9/3.2	IN5441A	450	2.5/3.0/3.1	IN5461A	600	2.7/3.0/3.1							
	9.2				IN5442A	450	2.5/3.0/3.1	IN5462A	600	2.8/3.0/3.1							
	10	IN5140	300	2.8/3.0/3.3	IN5443A	400	2.8/3.0/3.1	IN5463A	550	2.8/3.0/3.1							
	12	IN5141	300	2.8/3.0/3.3	IN5444A	400	2.8/3.0/3.1	IN5464A	550	2.8/3.0/3.1							
	15	IN5142	250	2.8/3.0/3.3	IN5445A	400	2.8/3.0/3.1	IN5465A	550	2.8/3.0/3.1							
	18	IN5143	250	2.8/3.1/3.4	IN5446A	350	2.8/3.0/3.1	IN5466A	500	2.8/3.0/3.1							
	20				IN5447A	350	2.8/3.0/3.1	IN5467A	500	2.8/3.0/3.1							
	22	IN5144	200	3.2/3.4/3.5	IN5448A	350	2.8/3.1/3.2	IN5468A	500	2.8/3.1/3.2							
	27	IN5145	200	3.2/3.4/3.5	IN5449A	350	2.8/3.1/3.2	IN5469A	500	2.8/3.1/3.2							
	33	IN5146	200	3.2/3.4/3.5	IN5450A	350	2.8/3.1/3.2	IN5470A	500	2.8/3.1/3.2							
	39	IN5147	200	3.2/3.4/3.5	IN5451A	300	2.8/3.1/3.2	IN5471A	450	2.8/3.1/3.2							
	47	IN5148	200	3.2/3.4/3.5	IN5452A	280	2.8/3.1/3.2	IN5472A	400	2.8/3.1/3.2							
	56				IN5453A	200	2.8/3.2/3.3	IN5473A	350	2.8/3.2/3.3							
	68				IN5454A	175	2.7/3.2/3.3	IN5474A	250	2.8/3.2/3.3							
	82				IN5455A	175	2.7/3.2/3.3	IN5475A	225	2.8/3.2/3.3							
	100				IN5456A	175	2.7/3.2/3.3	IN5476A	200	2.8/3.2/3.3							

PARAMETER	TEST CONDITIONS	UNIT	MIN	TYP	MAX	TEST CONDITIONS	UNIT	MIN	TYP	MAX	TEST CONDITIONS	UNIT	MIN	TYP	MAX
Reverse Breakdown Voltage	V _{BR} , I _R = 10 μA dc	Vdc	60	70	-	I _R = 10 μA dc	Vdc	30	-	-	I _R = 10 μA dc	Vdc	30	-	-
Reverse Leakage Current	V _R = 55 Vdc, T _A = 25° C V _R = 55 Vdc, T _A = 150° C	μA dc	-	-	0.02 20	V _R = 25 Vdc, T _A = 25° C V _R = 25 Vdc, T _A = 150° C	μA dc	-	-	0.02 20	V _R = 25 Vdc, T _A = 25° C V _R = 25 Vdc, T _A = 150° C	μA dc	-	-	0.02 20
Series Inductance	f = 250 MHz, L = 1/16"	nH	-	5	-	f = 250 MHz, L = 1/16"	nH	-	4	10	f = 250 MHz, L = 1/16"	nH	-	4	10
Case Capacitance	f = 1 MHz, L = 1/16"	pf	-	0.25	-	f = 1 MHz, L = 1/16"	pf	0.1	0.17	0.25	f = 1 MHz, L = 1/16"	pf	0.1	0.17	0.25
Diode Capacitance Temperature Coefficient	V _R = 4 Vdc, f = 1 MHz	ppm/°C	-	200	300	V _R = 4 Vdc, f = 1 MHz	ppm/°C	-	300	400	V _R = 4 Vdc, f = 1 MHz	ppm/°C	-	300	400

**MAXIMUM RATINGS						
PARAMETER	VALUE	UNIT	VALUE	UNIT	VALUE	UNIT
Reverse Voltage	60	Vdc	30	Vdc	30	Vdc
Device Dissipation @ T _A = 25° C Derate above 25° C	400 2.67	mW mW/° C	400 2.67	mW mW/° C	400 2.67	mW mW/° C
Operating Junction Temperature Range	+175	° C	+175	° C	+175	° C
Storage Temperature Range	-65 to +200	° C	-65 to +200	° C	-65 to +200	° C

Add Suffix "A" for ± 5% C_T Tolerance Substitute Suffix "B" for ± 5% C_T Tolerance, Suffix "C" for ± 2% C_T Tolerance, Suffix "D" for ± 1% C_T Tolerance.
Delete Suffix for ± 20% Tolerance.

**Indicates JEDEC Registered Data

PREISE:

Part Number	Price	Part Number	Price	Part Number	Price	Part Number	Price
1N 5139	-	1N 5148	17.90	ab 25	17.20	ab 100	14.50
1N 5139 A	-	1N 5148 A	25.50		24.80		19.80
1N 5441 A	-	1N 5456 A	14.20		13.90		11.50
1N 5441 B	-	1N 5456 B	17.50		16.90		13.90
1N 5441 C	-	1N 5456 C	21.90		21.10		17.70
1N 5461 A	-	1N 5476 A	25.80		24.90		20.50
1N 5461 B	-	1N 5476 B	33.50		32.90		26.90
1N 5461 C	-	1N 5476 C	46.90		45.80		37.50
1N 5461 D	-	1N 5476 D	88.50		78.70		58.50

KEV ELECTRONICS

NEUMÜLLER GM BH

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