

TUNING VARACTOR DIODE

DESCRIPTION:

The **ASI 1N5142A** is a Silicon Hyper-Abrupt Junction Microwave Tuning Varactor Diode.

MAXIMUM RATINGS

I_F	250 mA
V_R	60 V
P_{DISS}	400 mW @ T _A = 25 °C
T_J	-65 °C to +175 °C
T_{STG}	-65 °C to +200 °C

PACKAGE STYLE D0-204AA				
Dim:	Millimeters		Inches	
	Min	Max	Min	Max
A	5.84	7.62	0.230	0.300
B	2.16	2.72	0.085	0.107
D	0.46	0.56	0.018	0.022
F	---	1.27	---	0.050
K	25.40	38.10	1.000	1.500

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
V_{BR}	I _R = 10 μA	60			V
I_R	V _R = 55 V T _A = 150 °C			20	μA
C_{T4}	V _R = 4.0 V f = 1.0 MHz	14.3	15	15.7	pF
α	V _R = 4.0 V f = 1.0 MHz	0.38	0.41		---
Q	V _R = 4.0 V f = 50 MHz	250			---
L_S	f = 250 MHz		5.0		nH
C_C	f = 1.0 MHz		0.25		pF
C_{T4}/C_{T60}	V _R = 4 & 60 V f = 1.0 MHz	2.8	3.0		---