

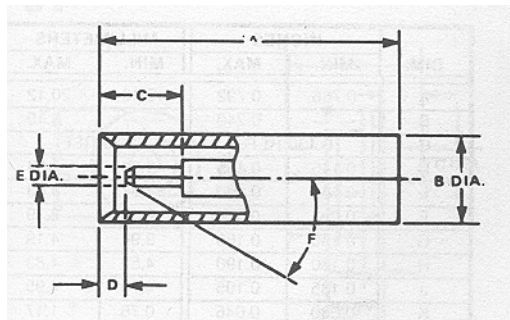
SILICON MIXER DIODE

DESCRIPTION:

The **ASI 1N53** is a Silicon Mixer Diode Designed for low noise performance in Ka-Band Applications Operating up to 35 GHz.

FEATURES:

- Low Noise Figure
- Wider Bandwidth than cartridge diodes in X Band

PACKAGE STYLE DO-36


DIM.	INCHES		MILLIMETERS	
	MIN.	MAX.	MIN.	MAX.
A	0.545	0.555	13,84	14,10
B	0.158	0.162	4,01	4,11
C	0.099	—	2,51	—
D	0.010	0.018	0,25	0,46
E	0.019	0.021	0,48	0,53
F	42°	48°	42°	48°

CHARACTERISTICS $T_C = 25^\circ\text{C}$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIM	UNITS
N_F	F = 9375 MHz $R_L = 100 \Omega$ $P_{i0} = 1.0 \text{ mW}$ $I_F = 30 \text{ MHz}$ $NF_{\text{if}} = 1.5 \text{ dB}$			13.1	dB
V_{SWR}				1.6	
Z_{IF}	$R_L = 100 \Omega$ $f = 1000 \text{ Hz}$	400		800	Ω
Test Frequency	F = 9375 MHz $R_L = 100 \Omega$ $P_{i0} = 1.0 \text{ mW}$ $I_F = 30 \text{ MHz}$ $NF_{\text{if}} = 1.5 \text{ dB}$		35		GHz