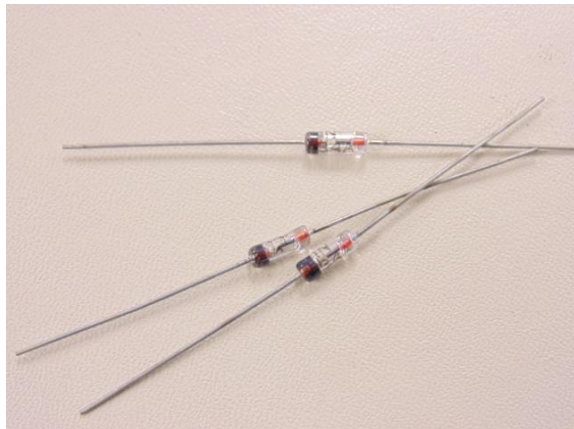




ABSTRACT

The 1N306 is a highly popular glass passivated germanium diode that features a low leakage current, flat junction capacitance, and high mechanical strength. This device is recommended for applications such as AM/FM detectors, ratio detectors, FM discriminators, TV audio detectors, RF input probes, and TV video detectors.

The 1N306 can also be used in many more AM, FM, and TV-IF applications, replacing point contact devices.

ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Min.	Max.	Units
Peak Inverse Voltage (Repetitive), Measured @ $I_R = 1\text{mA}$	PIV	--	15	Volts
Peak Forward Surge Current Non-Repetitive, $t=1\text{s}$	I_{FSM}	--	0.5	Amps
Peak Forward Surge Current Repetitive	I_{FSR}	--	100	mA
Average Rectified Forward Current	I_O	--		mA
Operating and Storage Temperature Range	T_J/T_{STG}	-55	+75	°C

$T_{amb} = 25^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

Parameter	Test Conditions	Symbol	Min.	Max.	Units
Forward Voltage Drop	$I_F = 5.0\text{mA}$	V_F	--	1.0	Volts
Reverse Leakage	$V_R = 10\text{ Volts}$	I_R	--	2	μA
	$V_R = 50\text{ Volts}$	I_R	--		μA
Breakdown Voltage	$I_R = 1.0\text{ mA}$	PIV	65	--	Volts

$T_{amb} = 25^\circ\text{C}$

MECHANICAL DIMENSIONS

