

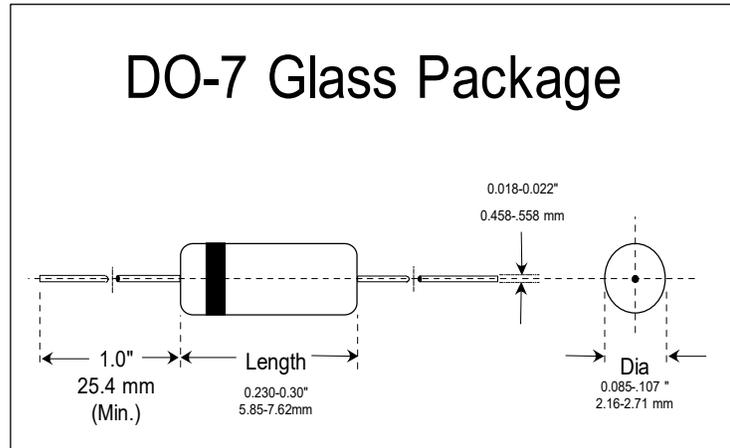
1N277 Germanium Diode Datasheet

Optimized for Radio Frequency Response

Can be used in many AM, FM and TV-IF applications, replacing point contact devices.

Applications

- AM/FM detectors
- Ratio detectors
- FM discriminators
- TV audio detectors
- RF input probes
- TV video detectors



Features

- Lower leakage current
- Flat junction capacitance
- High mechanical strength
- At least 1 million hours MTBF
- BKC's Sigma-Bond™ plating for problem free solderability

Absolute Maximum Ratings at $T_{amb} = 25\text{ }^{\circ}\text{C}$

Parameter	Symbols	Min.	Max.	Units
Peak Inverse Voltage	PIV	**	110	Volts
Breakdown Voltage @ $I_R = 1.0\text{ mA}$	V_{BR}	110		Volts
Surge Current, $t = 1\text{ Second}$	I_{FSM}		0.5	Amps
Peak Operating Current	I_{OS}		270	mA
Average Rectified Forward Current	I_O		75	mA
Operating and Storage Temperatures	$T_{J\&STG}$	-65	+90	$^{\circ}\text{C}$

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

Parameter	Test Conditions	Symbols	Min.	Typ.	Max.	Units
Forward Voltage Drop	$I_F = 100\text{ mA}$	V_F			1.00	Volts
Reverse Leakage	$V_R = 10\text{ Volts}, T_{amb} = 75\text{ }^{\circ}\text{C}$	I_R	**		75	μA
Reverse Leakage	$V_R = 50\text{ Volts}, T_{amb} = 75\text{ }^{\circ}\text{C}$	I_R		**	250	μA
Breakdown Voltage @ $I_R = 1.0\text{ mA}$		PIV	110			Volts
Junction Capacitance	$f = 1\text{ MHz}, V_R = 0\text{ volt}$	C_J		0.8		pF