

Gold Bonded

1N60A

BKC

Germanium Diodes

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

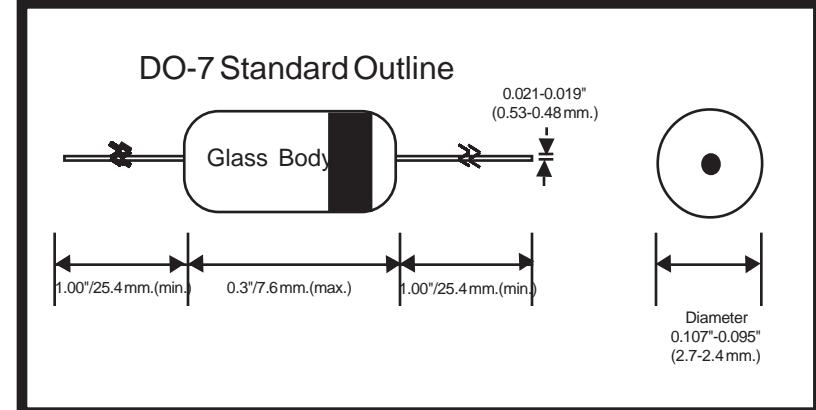
- Lower leakage current
- Flat junction capacitance
- High mechanical strength
- At least 1 million hours MTBF
- BKC's Sigma-Bond™ plating for problem free solderability

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

Parameter	Symbols	Min.	Max.	Units
Peak Inverse Voltage (Repetitive), Measured @ $I_R = 1 \text{ mA}$	PIV	**	40	Volts
Reverse Voltage @ $I_R = 250 \mu\text{A}$	V_R	40		Volts
Peak Forward Surge Current Non-Repetitive, $t = 1 \text{ Second}$	I_{FSM}		0.2	Amps
Peak Forward Surge Current Repetitive	I_{FSR}		50	mA
Average Rectified Forward Current	I_O		50	mA
Operating and Storage Temperatures	$T_{J \& STG}$	-55	+75	$^{\circ}\text{C}$

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

Parameter	Test Conditions	Symbols	Min.	Typ.	Max.	Units
Forward Voltage Drop	$I_F = 10 \text{ mA}$ $I_F = 30 \text{ mA}$	V_F	1.0	1.5	Volts	
			2.0	3.2		
Reverse Leakage	$V_R = 10 \text{ Volts}$ $V_R = 20 \text{ Volts}$ $V_R = 30 \text{ Volts}$	I_R	20	135		
			90	450	μA	
			300	1100		
Junction Capacitance	$f = 1 \text{ MHz}$, $V_R = 1 \text{ volt}$	C_J		1.0	pF	
Reverse Recovery Time	trr ($I_F = 10 \text{ mA}$ to $I_R = 60 \text{ mA}$, $R = 100 \text{ Ohm}$)	τ	--	500		nSec



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