

**Gold Bonded**

**AA143**

**Germanium Diodes**

*Optimized for Radio Frequency Response*

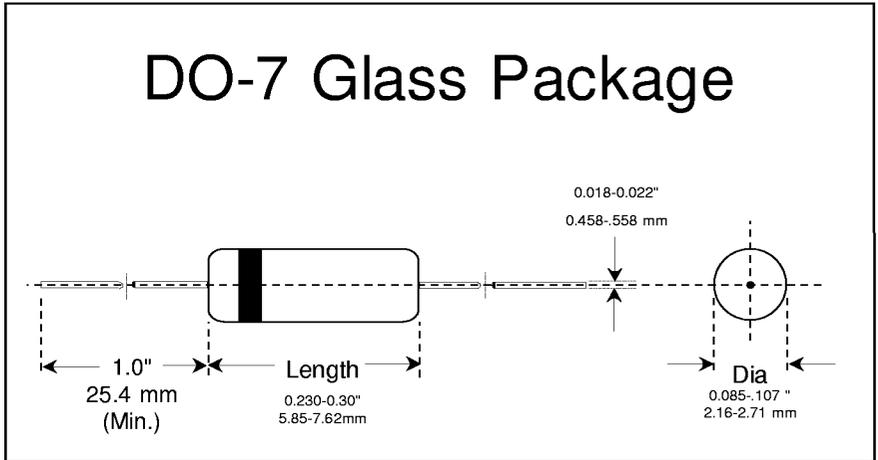
Can be used in many AM, FM and TV-IF applications, replacing point contact devices.

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

Parameter	Symbols	Min.	Max.	Units
Peak Inverse Voltage	PIV	**	25	Volts
Surge Current, $t = 1$ Second	$I_{FSM}$		0.5	Amps
Average Rectified Forward Current	$I_o$		40	mA
Peak Operating Current	$I_{OS}$		325	mA
Operating and Storage Temperatures	$T_{J \& STG}$	-65	+85	$^{\circ}\text{C}$

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

Parameter	Test Conditions	Symbols	Min.	Typ.	Max.	Units
Forward Voltage Drop	$I_F = 2.0\text{ mA}$	$V_F$	0.29		0.33	Volts
Forward Voltage Drop	$I_F = 15\text{ mA}$	$V_F$	***		0.50	Volts
Breakdown Voltage @ $I_R = 0.1\text{ mA}$		PIV	25			Volts
Reverse Leakage	$V_R = 50\text{ Volts}$	$I_R$		**	100	$\mu\text{A}$
Junction Capacitance	$f = 1\text{ MHz}, V_R = 3\text{ volts}$	$C_J$		1.2		pF
Reverse Recovery Time	$I_F = 2\text{ mA}, I_R = 0.2\text{ mA}$			$T_{rr}$	70	nSec



6 Lake Street - Lawrence, MA 01841  
 Tel: 978-681-0392 - Fax: 978-681-9135