

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

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

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	$If = 2\text{mA}, Ir = 0.2 \text{ mA}$		Trr	70	nSec	

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