

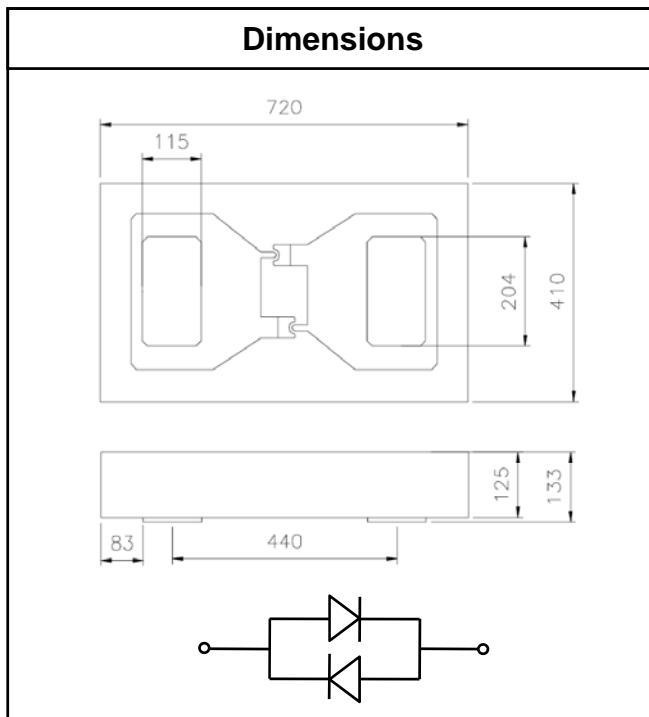
## Schottky Barrier Diode (GaAs)

### Features

- Anti-parallel
- High Cut-off frequency
- Low Series Resistance
- Low Capacitance
- Designed for Easy Circuit Insertion
- Silicon Nitride Passivation

### Application

- Mixer and Detectors
- X, K and Ka Bands Transceiver
- 30 GHz and 60 GHz Radios
- Automotive Radar Detectors



### Absolute Maximum Rating ( $T_a = 25^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Forward Current	$I_F$	15	mA
Incident Power	-	+20	dBm
Operation Temperature	$T_{OPR}$	-55 to +125	°C
Storage Temperature	$T_{STG}$	-65 to +150	°C
Insertion Temperature	-	$250 \pm 5$	°C

### Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F = 1 \text{ mA}$	600	-	850	mV
$V_F$ Difference	$\Delta V_F$	$I_F = 1 \text{ mA}$		10	20	mV
Capacitance	$C_J$	$V = 0 \text{ V}$	-	45	65*	fF
Series Resistance	$R_S$	$10 \text{ mA}$	-	7	9	Ω

\* Capacitance for KBM-N56-1 (Single Junction Type) is per Schottky Diode