

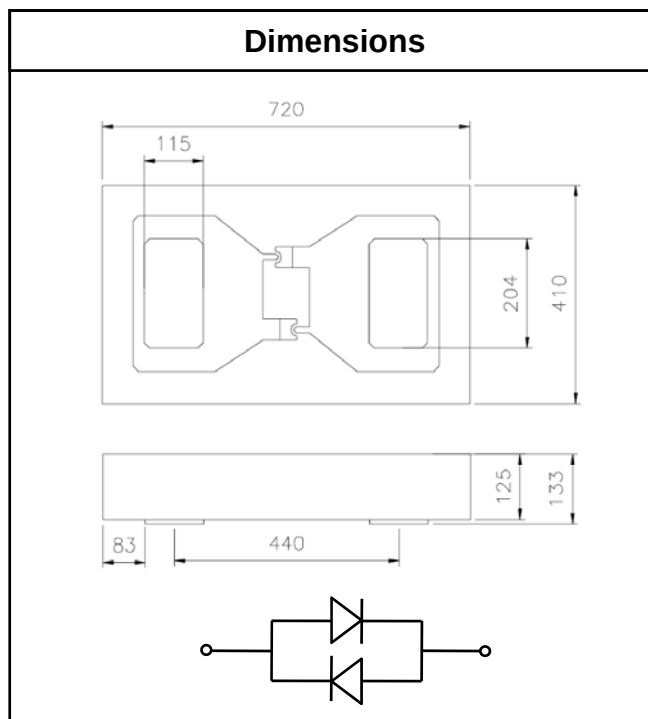
Schottky Barrier Diode (GaAs)

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	$^\circ\text{C}$
Storage Temperature	T_{STG}	-65 to +150	$^\circ\text{C}$
Insertion Temperature	-	250 ± 5	$^\circ\text{C}$

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	ΔV_F	$I_F = 1 \text{ mA}$		10	20	mV
Capacitance	C_J	$V = 0 \text{ V}$	-	45	65*	fF
Series Resistance	R_S	10 mA	-	7	9	Ω

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