

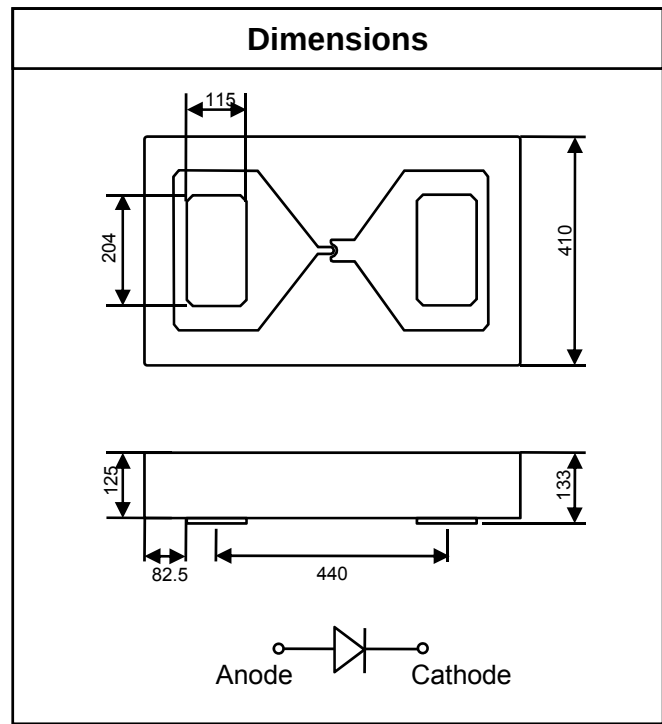
Schottky Barrier Diode (GaAs)

Features

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

Application

- Single and Balanced 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
Reverse Voltage	V_R	3	V
Incident Power	-	20	dBm
Operation Temperature	T_{OPR}	-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 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
Reverse Current	I_R	$V_R = 3 \text{ V}$	-	-	10	μA
Capacitance	C_J	$V = 0 \text{ V}$	-	45	65	fF
Series Resistance	R_S	10 mA	-	7	9	Ω
Breakdown Voltage	BV	10 μA	7	-	-	V