

# BA591WS

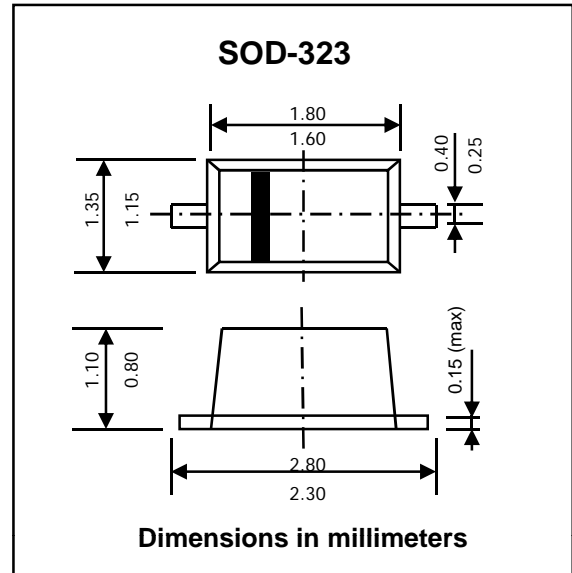
## BAND SWITCHING DIODE

### FEATURES :

- \* Very small plastic SMD package
- \* Low diode capacitance
- \* Low diode forward resistance
- \* Small inductance
- \* Pb / RoHS Free

### MECHANICAL DATA :

- \* Case : SOD-323 plastic Case
- \* Marking Code : " WL "



### ABSOLUTE MAXIMUM RATING (Ta = 25 °C)

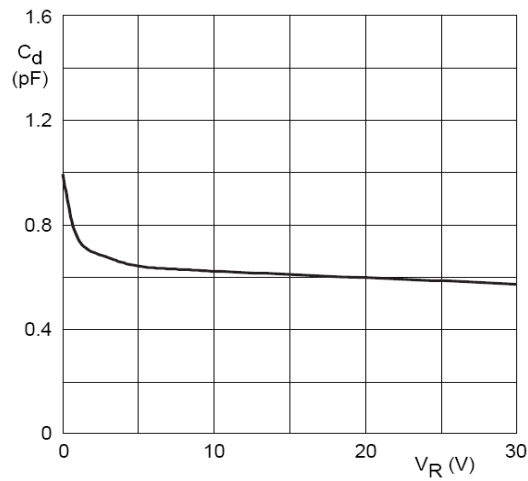
Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	$V_R$	100	V
Continuous Forward Current	$I_F$	100	V
Power Dissipation	$P_{tot}$	250	mA
Junction Temperature Range	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-65 to +150	°C

### ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Test Condition	Symbol	Typ.	Max.	Unit
Forward Voltage	$I_F = 10 \text{ mA}$	$V_F$	-	1.0	V
Reverse Current	$V_R = 20 \text{ V}$	$I_R$	-	20	nA
Diode Capacitance	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$	$C_D$	-	1.05	pF
	$V_R = 3 \text{ V}, f = 1 \text{ MHz}$		-	0.9	
Diode Forward Resistance	$I_F = 3 \text{ mA}, f = 100 \text{ MHz}$	$r_D$	-	0.7	$\Omega$
	$I_F = 10 \text{ mA}, f = 100 \text{ MHz}$		-	0.5	
Reverse Resistance	$V_R = 1 \text{ V}, f = 100 \text{ MHz}$	$1/g_P$	100	-	K $\Omega$
Series Inductance		$L_s$	2	-	nH

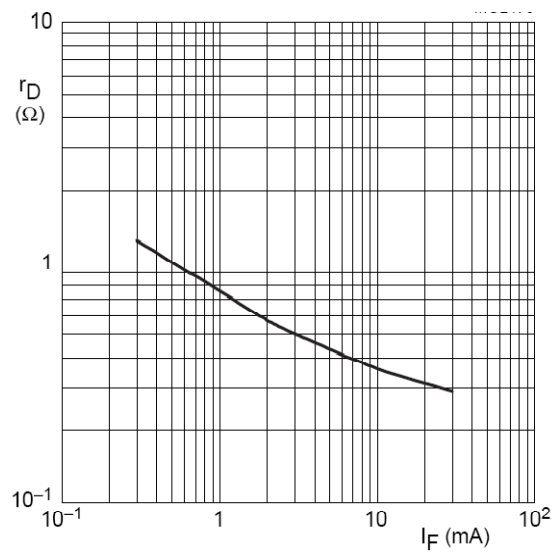
**RATINGS AND CHARACTERISTIC CURVES (BA591WS )**

**FIG.1 - Diode capacitance as a function of reverse voltage; typical values.**



$f = 1 \text{ MHz}; T_j = 25 \text{ }^\circ\text{C}.$

**FIG.2 - Diode forward resistance as a function of forward current; typical values**



$f = 100 \text{ MHz}; T_j = 25 \text{ }^\circ\text{C}.$