

SMD General Purpose Diode

Primary characteristics		
Parameter	Value	Unit
V_R	50	V
Power rating	500	mW

Features

- SOD-323 case for easy automatic insertion.
- Pb-free and RoHS compliant
- General purpose
- Low diode capacitance
- Low diode forward resistance
- Good for RF applications

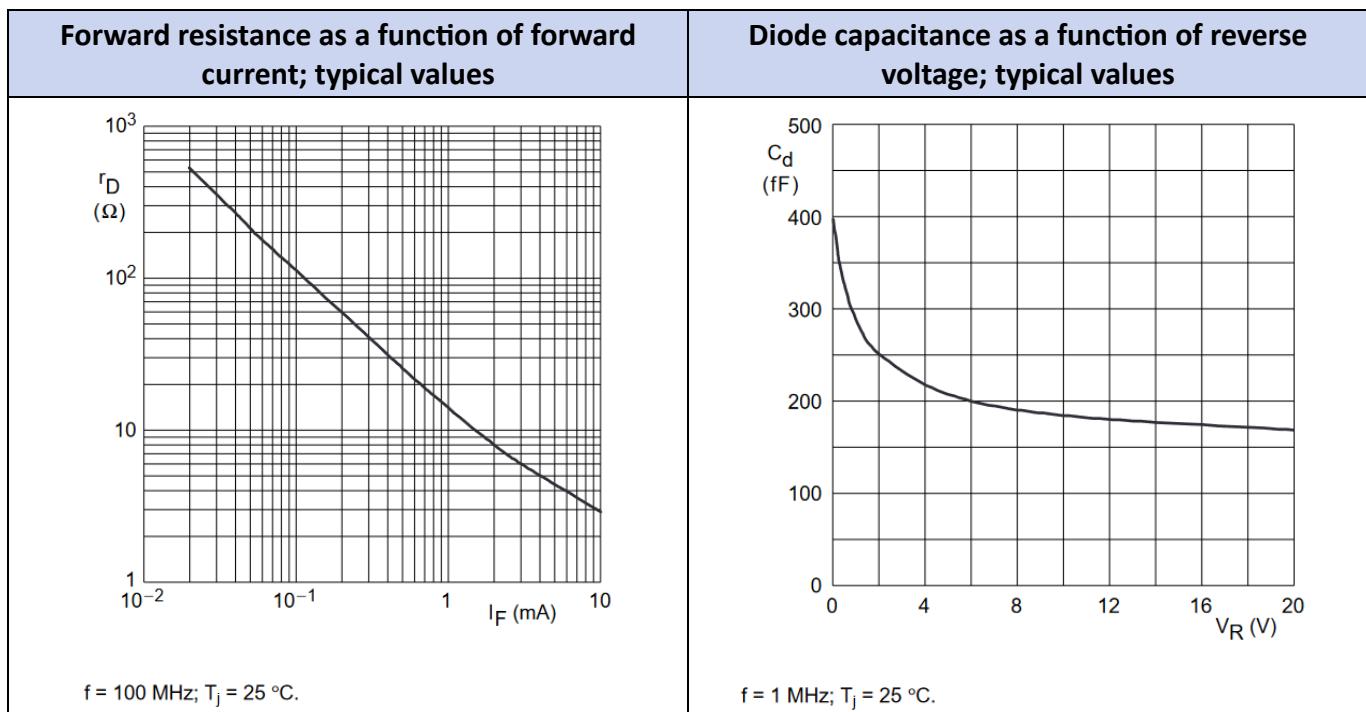
Case dimensions									
SOD-323									
Unit	A	B	C	D	E	G	H	J	
mm	2.5 ±0.2	1.7 ±0.1	1.25 ±0.10	1.00 -0.2 +0.15	0.3 -0.05 +0.1	0.25 -0.15 +0.2	0.2 -0.1 +0.05	<0.15	

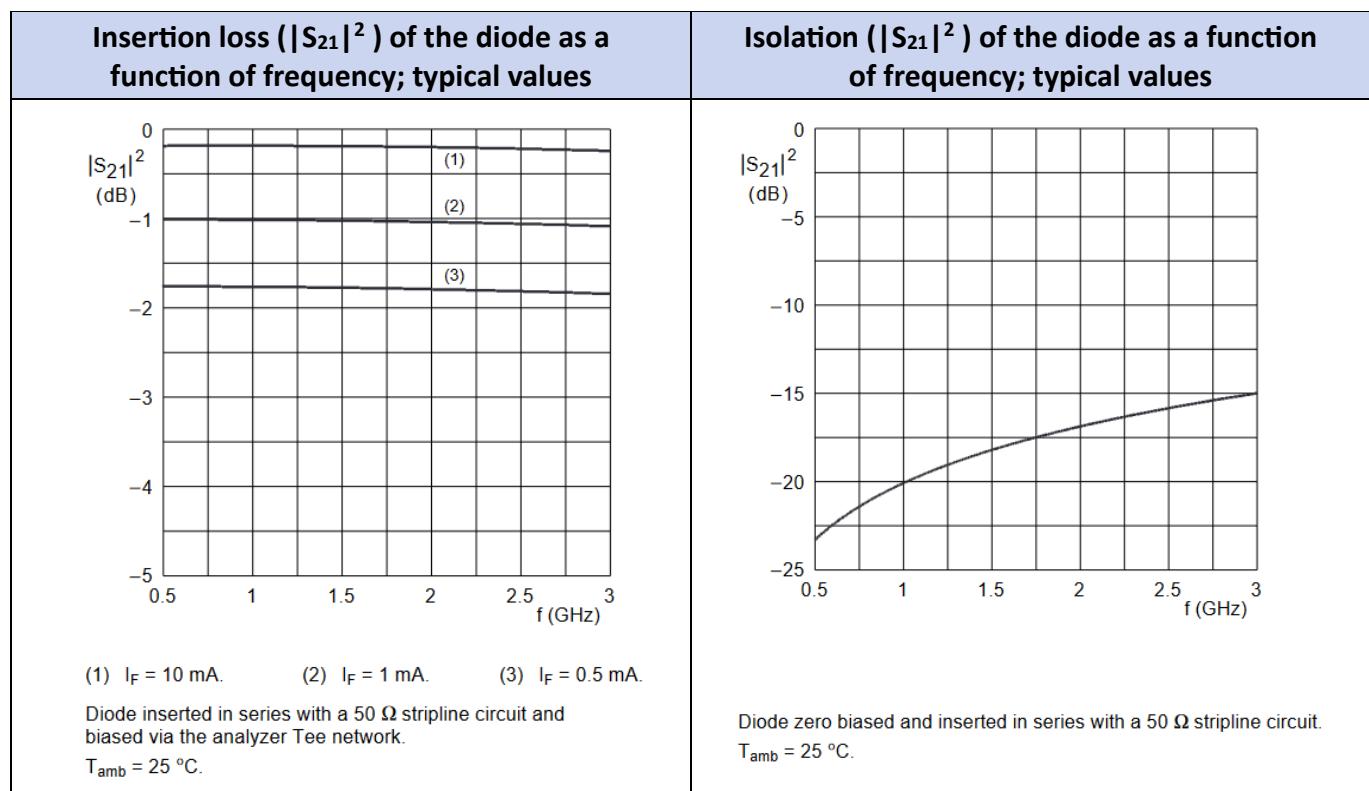
Absolute maximum ratings				
Parameter	Symbol	Value	Unit	
Continuous reverse voltage	V_R	50	V	
Continuous forward current	I_F	50	mA	
Total power dissipation ($T_S=90^\circ\text{C}$)	P_{tot}	500	mW	
Storage Temperature Range	T_{stg}	-65 ~ 150	°C	
Junction Temperature Range	T_J	-65 ~ 150	°C	
In accordance with the Absolute Maximum Rating System (IEC 134).				

Electrical and thermal characteristics ($T_j=25^\circ\text{C}$)

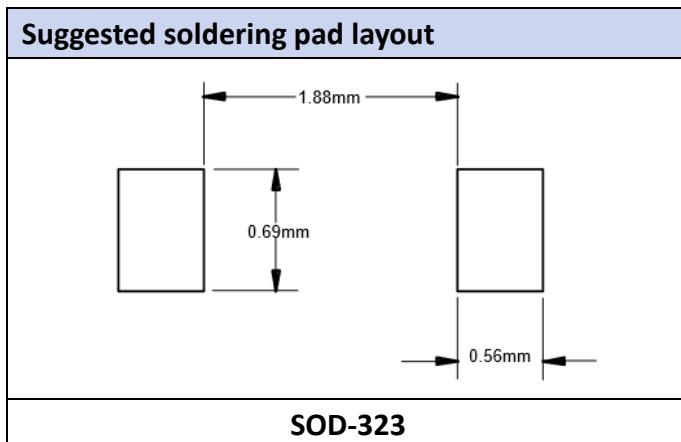
Parameter	Symbol	Test conditions	Value			Unit
			Min.	Typ.	Max.	
Forward voltage	V_F	$I_F=50\text{mA}$	-	0.95	1.1	V
Reverse voltage	V_R	$I_R=10\mu\text{A}$	50	-	-	V
Reverse current	I_R	$V_R=50\text{V}$	-	-	100	nA
Diode capacitance	C_d	$V_R=0\text{V}, f=1\text{MHz}$	-	0.4	-	pF
		$V_R=1\text{V}, f=1\text{MHz}$	-	0.3	0.55	
		$V_R=5\text{V}, f=1\text{MHz}$	-	0.2	0.35	
Diode forward resistance	r_D	$I_F=0.5\text{mA}, f=100\text{MHz}^1)$	-	25	40	Ω
		$I_F=1\text{mA}, f=100\text{MHz}^1)$	-	14	25	
		$I_F=10\text{mA}, f=100\text{MHz}^1)$	-	3	5	
Thermal resistance from junction to soldering point	R_{thj-s}	-	85			K/W

1) Guaranteed on AQL basis: inspection level S4, AQL 1.0





Ordering information			
Part Number	Package	Shipping Quantity	Dimensions
BAP50-03	SOD-323	3000 pcs / reel	---



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