

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low Diode Capacitance
- Low Diode Forward Resistance

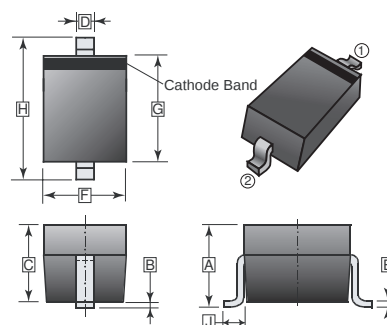
MARKING

A81

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-323	3K	7 inch

SOD-323



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.05 REF.		E	0.080	0.180
B	0.20 REF.		F	1.15	1.45
C	0.80	1.00	G	1.60	1.80
D	0.25	0.40	H	2.30	2.70

MAXIMUM RATINGS (Single diode @ $T_A = 25^\circ\text{C}$)

Parameter	Symbol	Ratings	Unit
Continuous Reverse Voltage	V_R	50	V
Continuous Forward Current	I_F	50	mA
Power Dissipation ($T_A = 90^\circ\text{C}$)	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	85	$^\circ\text{C} / \text{W}$
Junction, Storage Temperature	T_J, T_{STG}	150, -55 ~ +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (at $T_A = 25^\circ\text{C}$ unless otherwise specified)

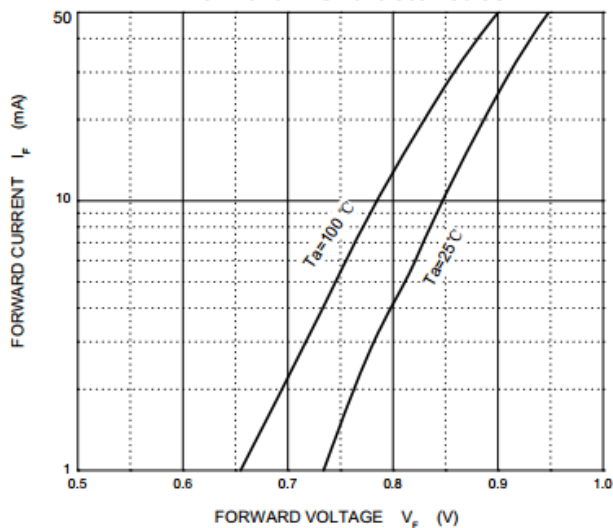
Parameters	Symbol	Min.	Max.	Unit	Test Conditions
Continuous Reverse Voltage	V_R	50	-	V	$I_R = 10\mu\text{A}$
Forward Voltage	V_F	-	1.1	V	$I_F = 50\text{ mA}$
Reverse Current	I_R	-	100	nA	$V_R = 50\text{ V}$
Diode Capacitance	C_{D1A}	-	0.91	pF	$V_R = 0, f = 1\text{MHz}$
	C_{D1B}	-	1.11		$V_R = 0, f = 1\text{MHz}$
	C_{D2}	-	0.55		$V_R = 1\text{ V}, f = 1\text{MHz}$
	C_{D3}	-	0.35		$V_R = 5\text{ V}, f = 1\text{MHz}$
Diode Forward Resistance ¹	r_D	-	40	Ω	$I_F = 0.5\text{ mA}, f = 100\text{ MHz}$
		-	25		$I_F = 1\text{ mA}, f = 100\text{ MHz}$
		-	5		$I_F = 10\text{ mA}, f = 100\text{ MHz}$

Note:

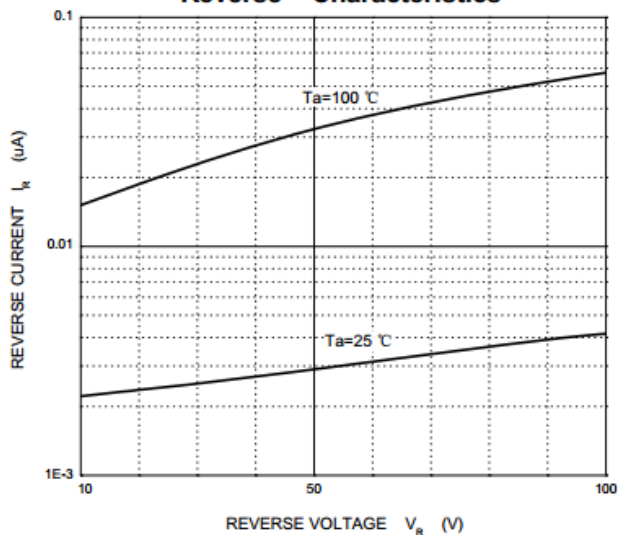
1. Guaranteed on AQL basis: inspection level S4,AQL 1.0

RATINGS AND CHARACTERISTIC CURVES

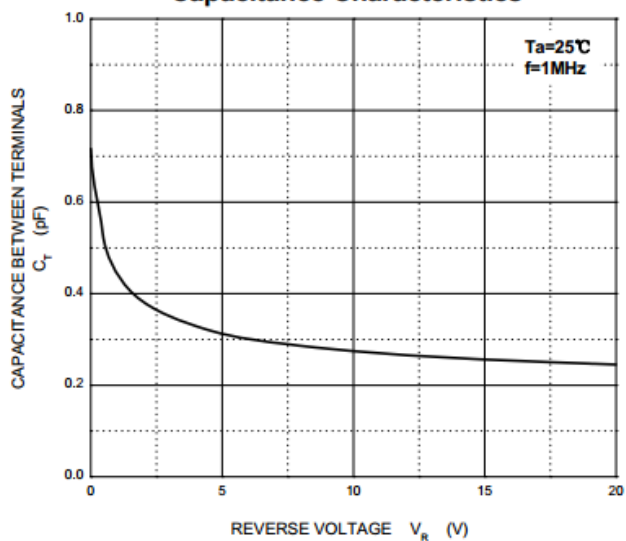
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

