

Features

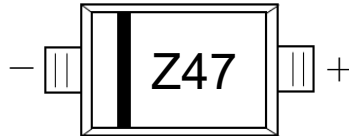
- Low Leakage Current
- Ideal for Surface Mounted Applications



SOD-123 top view



Schematic diagram



Marking and pin assignment



Halogen-Free

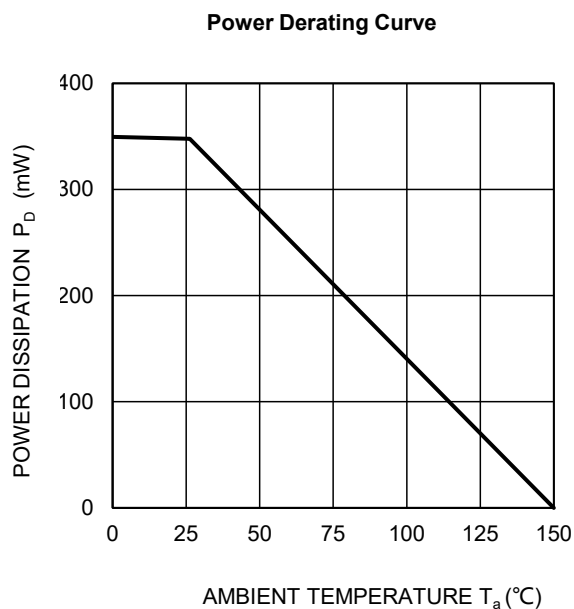
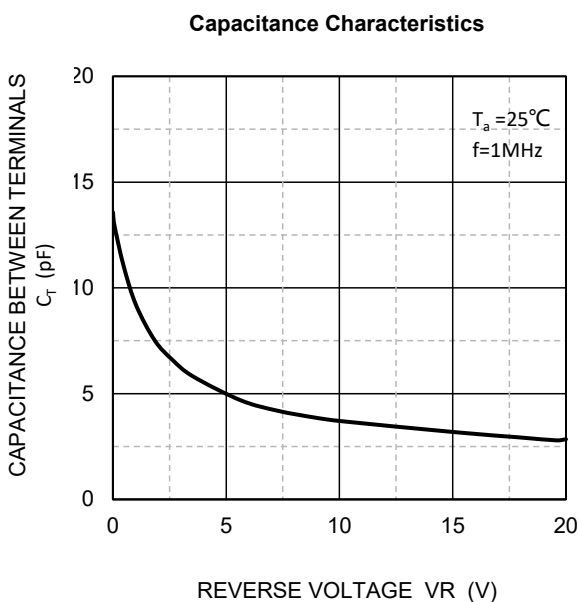
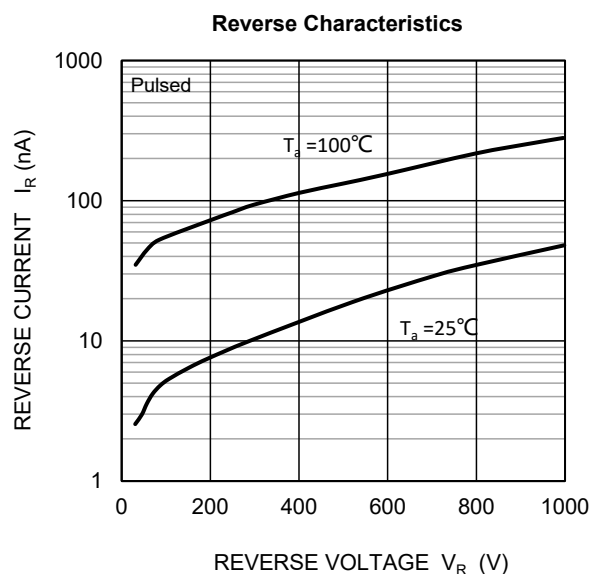
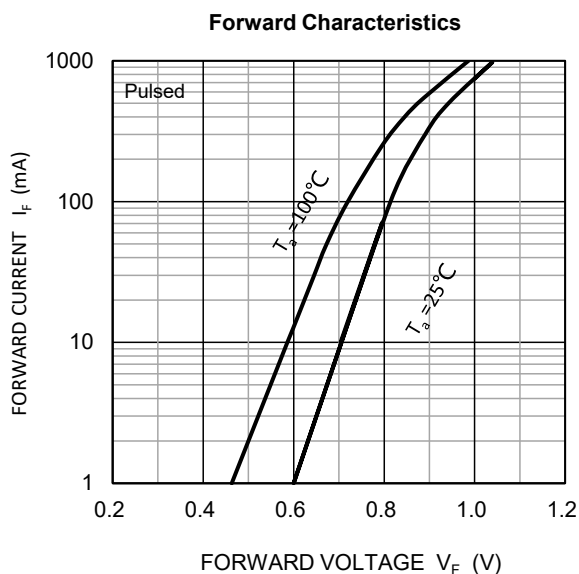
Maximum Ratings($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	1000	V
V_R	Reverse Voltage	1000	V
$V_{R(RMS)}$	RMS Reverse Voltage	700	V
I_O	Average Rectified Output Current	1	A
I_{FSM}	Non-repetitive Peak Forward Surge Current@t= 8.3ms	7.5	A
P_D	Power Dissipation	350	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	357	$^{\circ}\text{C/W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

Electrical Characteristics ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage	$I_R=0.1\text{mA}$	1000	--	--	V
I_R	Reverse current	$V_R=1000\text{V}$	--	--	5	μA
V_F	Forward voltage	$I_F=1\text{A}$	--	--	1.1	V
C_{tot}	Total capacitance	$V_R=4\text{V}, f=1\text{MHz}$	--	--	15	pF

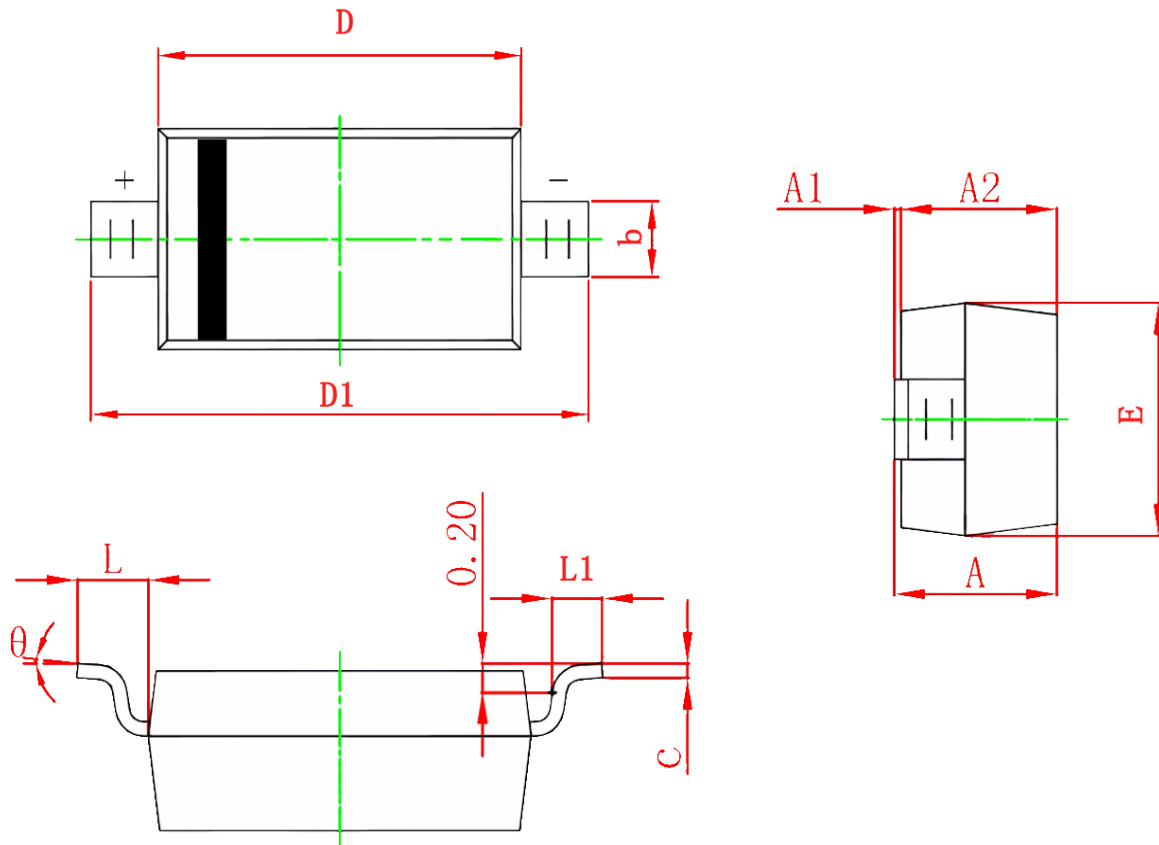
Typical Operating Characteristics



Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
2CZ4007	SOD-123	Z47	3,000	45,000	180,000	7"reel

SOD-123 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	2.600	2.800	0.102	0.110
D1	3.550	3.850	0.140	0.152
E	1.500	1.700	0.059	0.067
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°