

**Small Signal Product**

**Rectifier Diode**

**FEATURES**

- Surface Mount Device Type
- Moisture sensitivity level 1
- Pb free and RoHS compliant
- Green compound (Halogen free) with suffix "G" on packing code and prefix "G" on date code
- Low Leakage Current
- Ideal for Surface Mounted Applications



**SOD-123**

**MECHANICAL DATA**

- Case: Bend lead SOD-123 small outline plastic package
- Terminal: Matte tin plated, lead free , solderable per MIL-STD-202, Method 208 guaranteed
- High temperature soldering guaranteed: 260°C/10s
- Polarity: Indicated by cathode band
- Marking: Z46

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)**

PARAMETER	SYMBOL	VALUE	UNIT
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	800	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	560	V
Forward Current	I <sub>o</sub>	1.0	A
Non-Repetitive Peak Forward Surge Current, 8.3 ms	I <sub>FSM</sub>	7.5	A
Half Sine Wave			
Power Dissipation	P <sub>D</sub>	350	mW
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	357	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>STG</sub>	- 55 to + 150	°C

PARAMETER	SYMBOL	MIN	TYP	MAX	TEST CONDITION	UNIT
Reverse Breakdown Voltage	V <sub>(BR)</sub>	800		-	I <sub>R</sub> =100uA	V
Reverse Leakage Current	I <sub>R</sub>	-		5.0	V <sub>R</sub> =800V	μA
Forward Voltage	V <sub>F</sub>			1.1	I <sub>F</sub> =1A	V
Total Capacitance	C <sub>tot</sub>	-		15	V <sub>R</sub> =4V, f=1.0MHz	pF
Reverse Recovery Time (Note 1)	trr	1.0		1.6		μs

Notes: 1. Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>RR</sub>=0.25A

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<b>ORDERING INFORMATION</b>						
<b>PART NO.</b>	<b>MANUFACTURE CODE(Note)</b>	<b>PACKING CODE</b>	<b>GREEN COMPOUND CODE</b>	<b>PACKAGE</b>	<b>PACKING</b>	<b>MARKING</b>
2CZ4006		RP	G	SOD-123	3K / 7" Reel	Z46

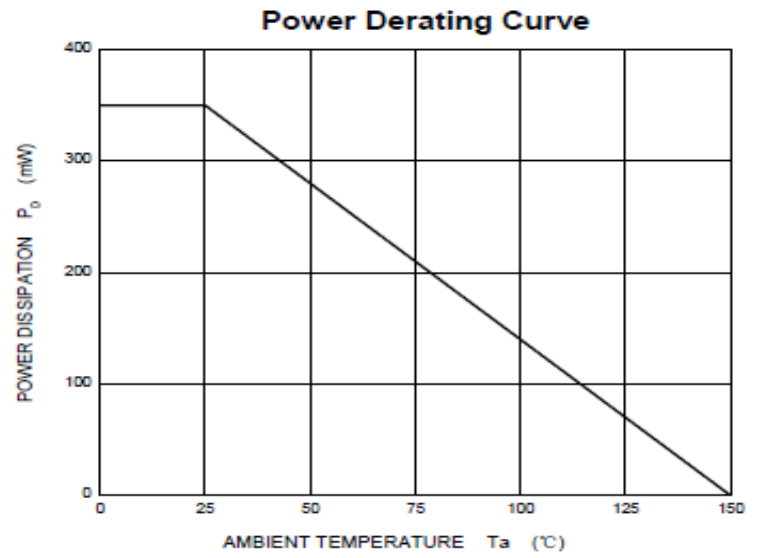
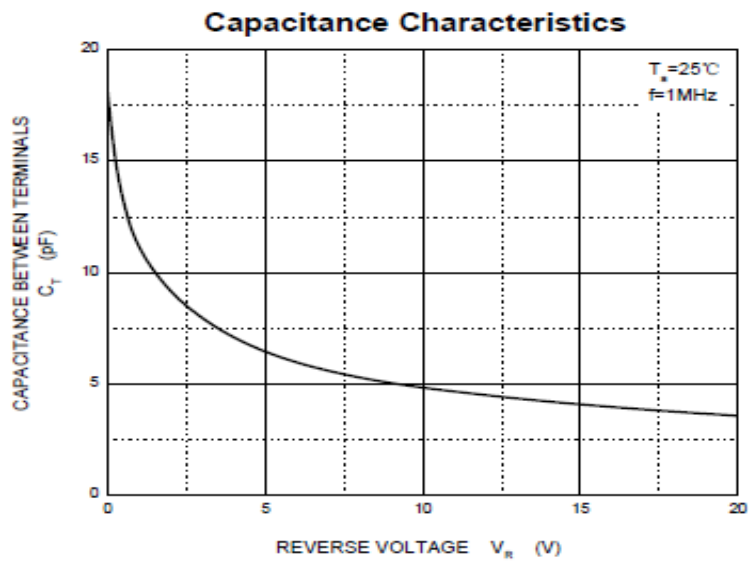
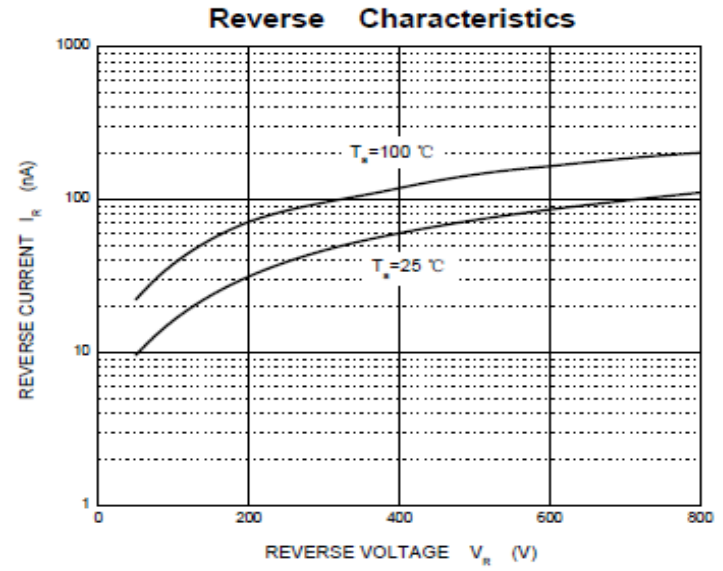
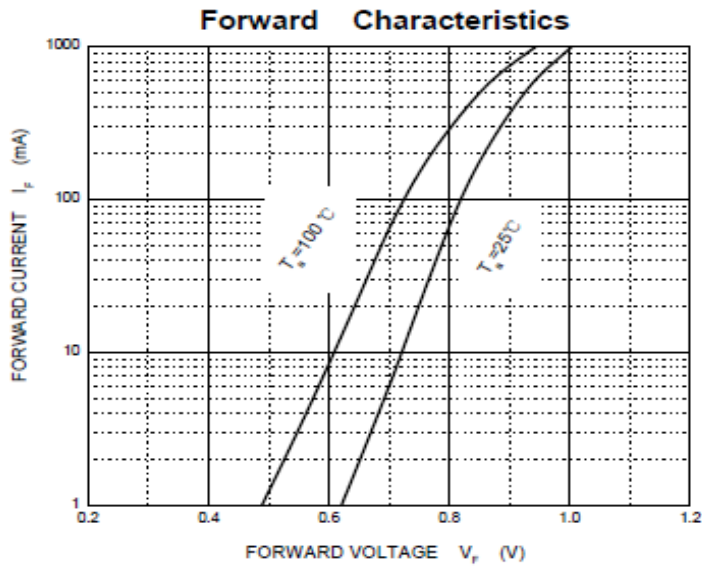
Note: Manufacture special control, if empty means no special control requirement.

<b>EXAMPLE</b>					
<b>PREFERRED P/N</b>	<b>PART NO.</b>	<b>MANUFACTURE CODE</b>	<b>PACKING CODE</b>	<b>GREEN COMPOUND CODE</b>	<b>DESCRIPTION</b>
2CZ4006 RPG	2CZ4006		RP	G	Green compound
2CZ4006-M0 RPG	2CZ4006	M0	RP	G	Green compound

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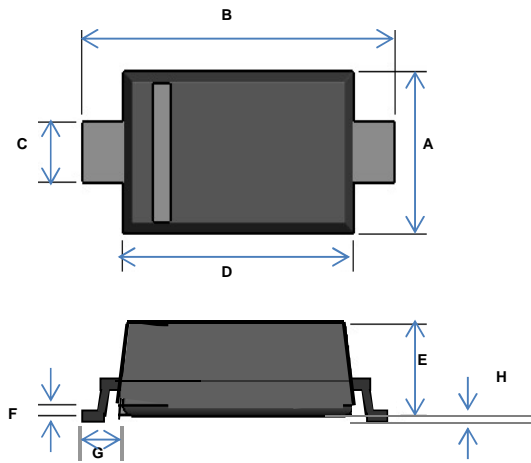
**RATINGS AND CHARACTERISTICS CURVES (2CZ4006)**

(TA=25°C unless otherwise noted)



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**DIMENSIONS**  
**SOD-123**



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.40	1.80	0.055	0.071
B	3.55	3.85	0.140	0.152
C	0.45	0.70	0.018	0.028
D	2.55	2.85	0.100	0.112
E	0.95	1.35	0.037	0.053
F	0.05	0.15	0.002	0.006
G	0.50 REF		0.02 REF	
H	-	0.10	-	0.004