

Small Signal Product

Fast Recovery 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
- High Frequency Rectification
- 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: R6D

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage	V _{RRM}	600	V
Working Peak Reverse Voltage	V _{RWM}		V
RMS Reverse Voltage	V _{R(RMS)}		V
Average Rectified Output Current	I _o	1.0	A
Non-Repetitive Peak Forward Surge Current @t ≤ 8.3 ms	I _{FSM}	18	A
Power Dissipation	P _D	415	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	301	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{STG}	- 55 to + 150	°C

PARAMETER	SYMBOL	MIN	TYP	MAX	TEST CONDITION	UNIT
Reverse Leakage Current	I _R	-		1	V _R =600V	μA
Forward Voltage	V _F			1.15	I _F =0.7A	V
				1.3	I _F =1.0A	V
Total Capacitance	C _{tot}	-	15		V _R =0V, f=1.0MHz	pF
Reverse Recovery Time (Note 1)	trr			150		ns

Notes: 1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1A, I_{RR}=0.25A

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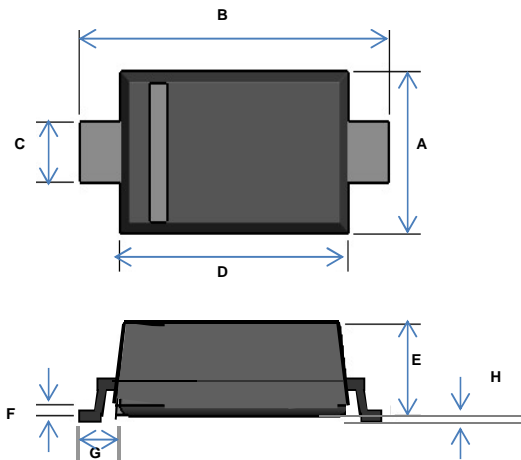
ORDERING INFORMATION						
PART NO.	MANUFACTURE CODE (Note)	PACKING CODE	GREEN COMPOUND CODE	PACKAGE	PACKING	MARKING
RS1006D1		RP	G	SOD-123	3K / 7" Reel	R6D

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

EXAMPLE					
PREFERRED P/N	PART NO.	MANUFACTURE CODE	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
RS1006D1 RPG	RS1006D1		RP	G	Green compound
RS1006D1-M0 RPG	RS1006D1	M0	RP	G	Green compound

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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