

Low VF SMD Schottky Barrier Diode

FEATURES

- Low power loss, high current capability, low VF
- Surface mount device type
- Moisture sensitivity level (MSL): 1
- Packing code with suffix "G" means green compound (halogen-free)









MECHANICAL DATA

- Case: Flat lead SOD-323F 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
- Weight: 4.85 ± 0.5 mg
- Marking Code: S9

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)					
PARAMETER		SYMBOL	VALUE	UNIT	
Power Dissipation		P _D	200	mW	
Peak Reverse Voltage		V _{RM}	45	V	
Reverse Voltage		V _R	40	V	
Mean Forward Current		Ι _Ο	0.1	А	
Non-Repetitive Peak Forward Surge Current	60Hz for 1 Cyc.	I _{FSM}	1.0	А	
Thermal Resistance (Junction to Ambient)	(Note)	R _{θJA}	500	°C/W	
Junction and Storage Temperature Range		T _J ,T _{STG}	-40 to +125	°C	

PARA	SYMBOL	MIN	MAX	UNIT	
Reverse Breakdown Voltage	I _R = 100 μΑ	V _(BR)	45	-	V
Forward Voltage	I _F = 10 mA	V _F	-	0.45	V
Reverse Leakage Current	V _R = 10 V	I _R	-	1	μA
Junction Capacitance	V _R = 10V , f = 1.0 MHz	CJ	-	6.0	pF

Note: Valid provided that electrodes are kept at ambient temeprature.



RATINGS AND CHARACTERISTICS CURVES

(T_A =25°C unless otherwise noted)





Fig. 2 Typical Forward Characteristics

Fig. 4 Total Capacitance VS. Reverse



Fig. 3 Typical Reverse Characteristics



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ORDERING INFORMATION						
PART NO.	PART NO.	PACKING PACKING CODE PACKAGE PACKING		PACKING		
	SUFFIX (Note 1)	CODE	SUFFIX	FACKAGE		
RB500V-40	XX	RR	G	SOD-323F	3,000 / 7" Reel	
RB300V-40	-XX	R9			10,000 / 13" Reel	

Note 1: Part No. Suffix "-xx " would be used for special requirement

EXAMPLE					
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
RB500V-40 RR	RB500V-40		RR		Multiple manufacture source
RB500V-40 RRG	RB500V-40		RR	G	Multiple manufacture source Green compound
RB500V-40-B0 RRG	RB500V-40	-В0	RR	G	Defined manufacture source Green compound



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PACKAGE OUTLINE DIMENSIONS



ЫМ	DIM. Unit		Unit (inch)		
	Min	Max	Min	Max	
А	1.15	1.35	0.045	0.053	
В	2.30	2.80	0.091	0.110	
С	0.25	0.40	0.010	0.016	
D	1.60	1.80	0.063	0.071	
E	0.80	1.10	0.031	0.043	
F	0.05	0.25	0.002	0.010	

SUGGEST PAD LAYOUT



DIM.	Unit (mm)	Unit (inch)		
DIN.	Тур.	Тур.		
А	0.63	0.025		
В	0.83	0.033		
С	1.60	0.063		
D	2.86	0.113		



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