

Plastic-Encapsulate Schottky Barrier Diode

Features

- ◆High Current Capability
- ◆Low Forward Voltage Drop

Mechanical Data

- ◆SOD-323 Small Outline Plastic Package
- ◆Polarity: Color band denotes cathode end
- ◆Mounting Position: Any

Pinning

1.Cathode	2.Anode
	
	
SOD-323	

Marking Code

RB501V-40	YFW S4
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Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameters	Symbol	Limit	Unit
Peak reverse voltage	V_{RM}	45	V
DC reverse voltage	V_R	40	V
Mean rectifying current	I_o	0.1	A
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	1.0	A
Typical thermal resistance	$R_{\theta JA}$	500	°C/W
Power Dissipation	P_D	200	mW
Junction temperature	T_j	125	°C
Storage temperature range	T_{STG}	-40-+125	°C

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified).

Parameters	Test conditions	Symbol	Min.	Typ.	Max.	Unit
Maximum forward voltage	IF = 100mA	VF			0.55	V
	IF = 10mA				0.34	
Maximum reverse current	VR=10V	IR			30	uA
Capacitance between terminals	VR=10V, f=1MHz	CT		6		pF

Fig.1 Derating curve

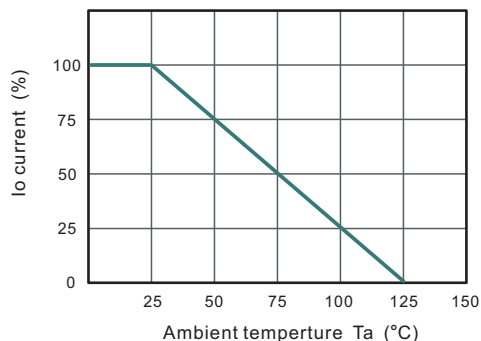


Fig.2 Typical Reverse Characteristics

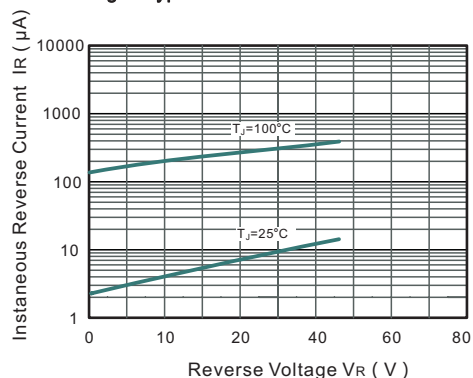


Fig.3 TYPICAL FORWARD VOLTAGE

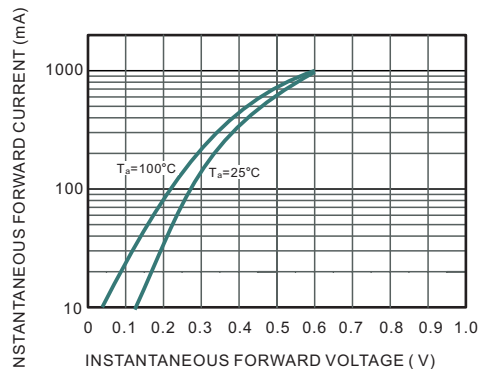


Fig.4 Typical Junction Capacitance

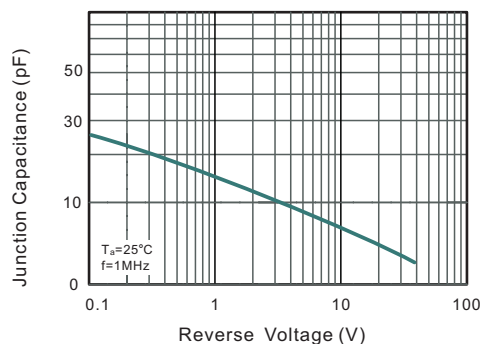
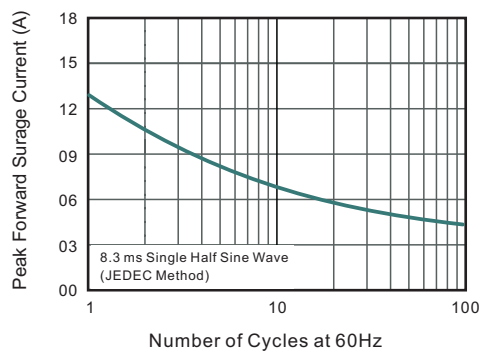


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Ordering information

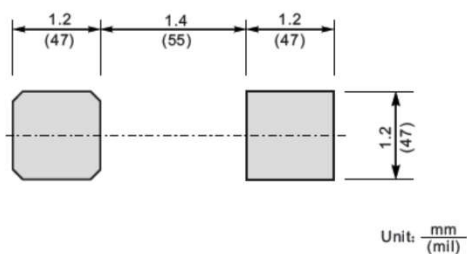
Package	Packing Description	Packing Quantity
SOD-323	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOD-323

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
C	0.08	0.15	3.1	5.9
D	1.2	1.4	47	55
E	1.4	1.8	63	70
E1	2.55	2.75	100	108
b	0.25	0.4	9.8	16
L1	0.2	0.45	7.9	16
A1	-	0.2	-	8
∠	9°			

The recommended mounting pad size



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