

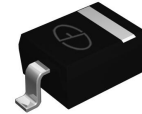
SOD- 323 Plastic-Encapsulate Schottky Barrir Diode

Features

- High Current Capability
- Low Forward Voltage Drop

Mechanical Data

- SOD-323 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any



Marking: SOD-323

MBR0520S: R2
 MBR0530S: R3
 MBR0540S: R4
 MBR0560S: R6

Maximum Ratings & Thermal Characteristics (T_A=25°C unless otherwise noted)

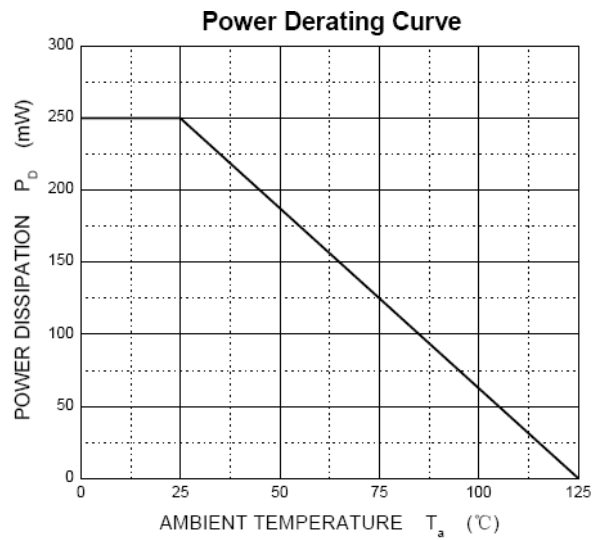
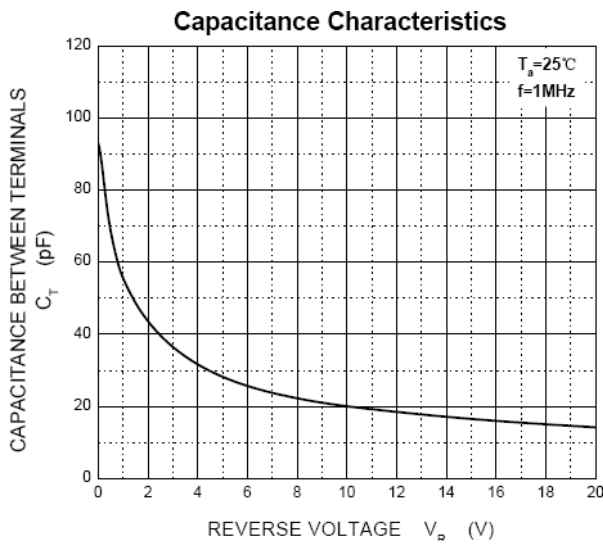
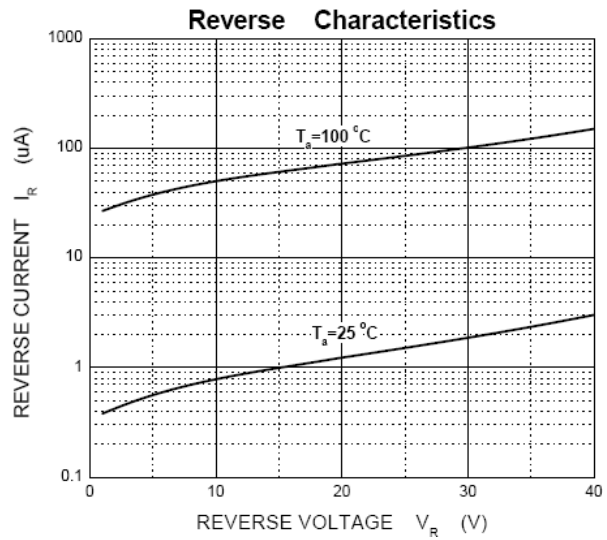
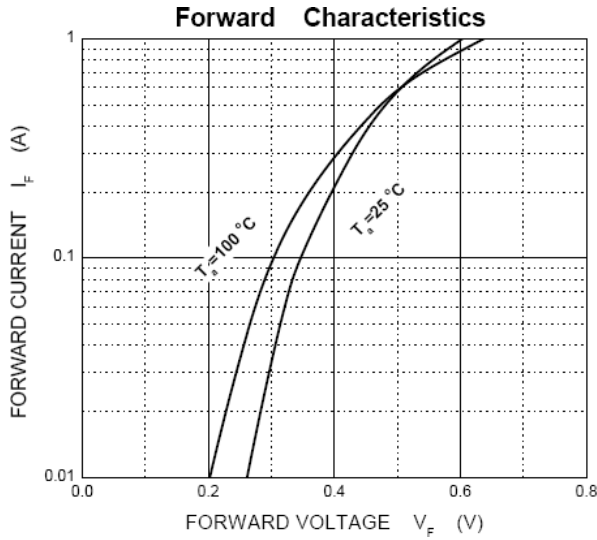
Parameters	Symbol	MBR0520S	MBR0530S	MBR0540S	MBR0560S	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	60	V
Maximum RMS voltage	V _{RMS}	14	21	28	42	V
Maximum DC blocking voltage	V _{DC}	20	30	40	60	V
Non-repetitive Peak Forward Current	I _{FM}	0.5				A
Peak forward surge current 8.3 ms single half sine-wave	I _{FSM}	5.0				A
Power Dissipation	P _D	250				mW
Typical thermal resistance	R _{θJA}	400				°C/W
Storage temperature range	T _{STG}	-50-+150				°C
Junction temperature	T _J	125				°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameters	Symbol	Test conditions	MBR 0520S	MBR 0530S	MBR 0540S	MBR 0560S	Unit
Maximum forward voltage	V _F	I _F = 0.5A	0.45				V
				0.55			
					0.55		
						0.70	
Maximum reverse breakdown voltage	V _R	I _R =1mA	20				V
				30			
					40		
						60	
Maximum reverse current	I _R	VR=20V	80				uA
		VR=30V	80				
		VR=40V	80				
		VR=60V	80				
Capacitance between terminals	C _T	VR = 4V, f = 1MHz	30				pF

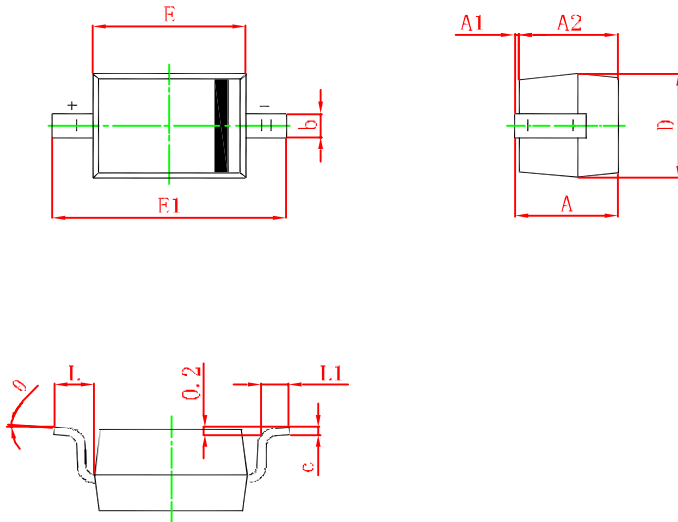
Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)



Package Outline Dimensions

millimeters



Symbol	Min	Max
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°

Revision History

Document Version	Date of release	Description of changes
Rev.A	2015.04.14	First issue

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