

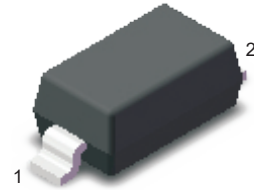


MBR0520W~MBR0540W Schottky Barrier Diodes

Features

- High Conductance
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection

SOD-123



1.Cathode  2.Anode

Marking Code :

MBR0520W: SD

MBR0530W: SE

MBR0540W: SF

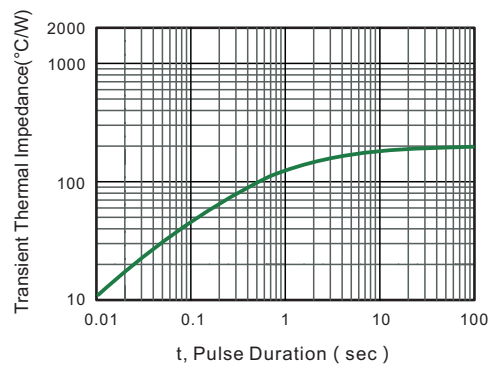
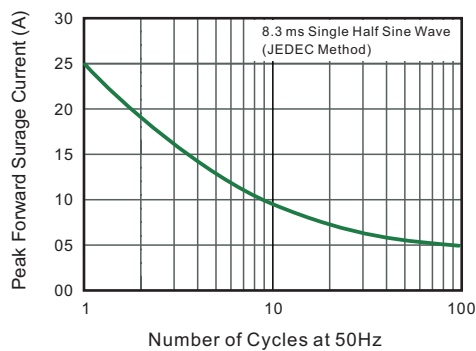
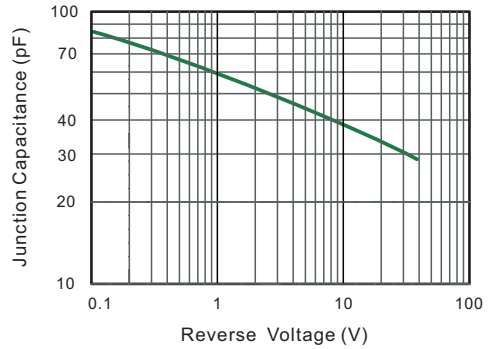
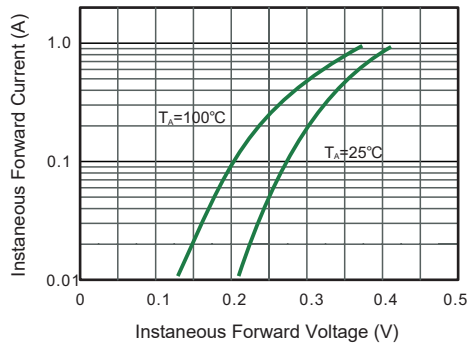
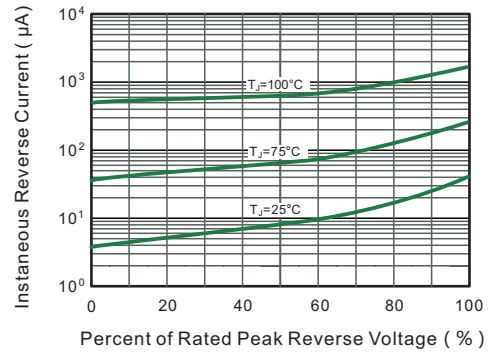
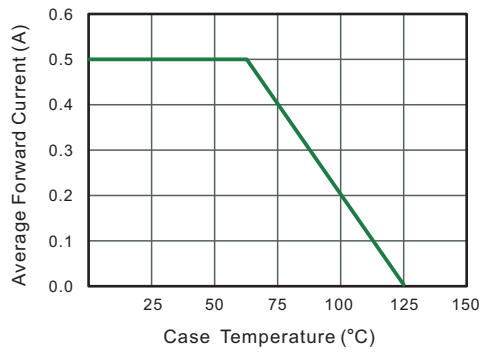
Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	MBR0520W	MBR0530W	MBR0540W	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage (DC)	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Average Forward Rectified Current at $T_c = 25^\circ\text{C}$	$I_{F(AV)}$	0.5			A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	25			A
Maximum Instantaneous Forward Voltage at $I_F=0.1\text{ A}$ at $I_F=0.5\text{ A}$ at $I_F=1\text{ A}$	V_F	0.330 0.390 --	0.375 0.430 --	-- 0.510 0.620	V
Maximum DC Reverse Current at Rated DC Blocking Voltage at $V_R=10\text{ V}$ at $V_R=15\text{ V}$ at $V_R=20\text{ V}$ at $V_R=30\text{ V}$ at $V_R=40\text{ V}$	I_R	75 -- 250 -- --	-- 20 -- 130 --	-- -- 10 -- 20	μA
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	200			$^\circ\text{C/W}$
Junction Temperature	T_J	125			$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150			$^\circ\text{C}$



Typical Characteristic Curves





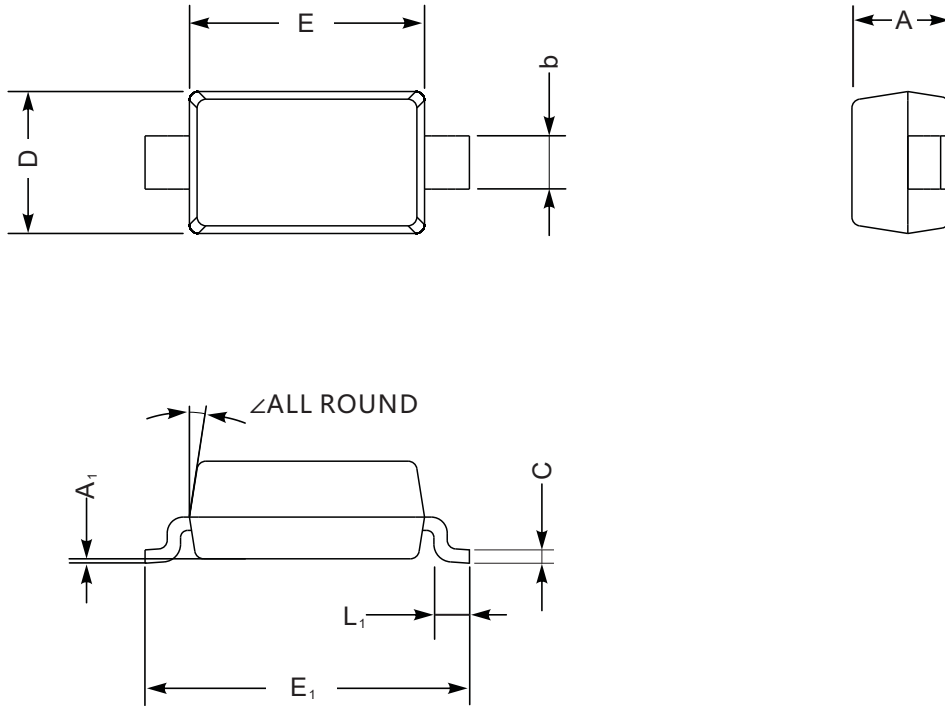
MBR0520W~MBR0540W

Schottky Barrier Diodes

Package Outline

SOD-123

Dimensions in mm



SOD-123 mechanical data

UNIT		A	C	D	E	E ₁	L ₁	b	A ₁	∠
mm	max	1.3	0.22	1.8	2.8	3.9	0.45	0.7	0.2	9°
	min	0.9	0.09	1.5	2.5	3.6	0.25	0.5	—	
mil	max	51	8.7	71	110	154	18	28	8	
	min	35	3.5	59	98	142	10	20	—	