

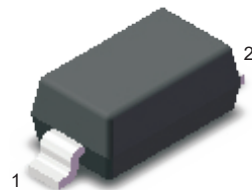
MBR0520WA~MBR0540WA

Schottky Barrier Diodes

Features

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

SOD-123W



1.Cathode —  — 2.Anode

Marking Code :

MBR0520WA: SD

MBR0530WA: SE

MBR0540WA: SF

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

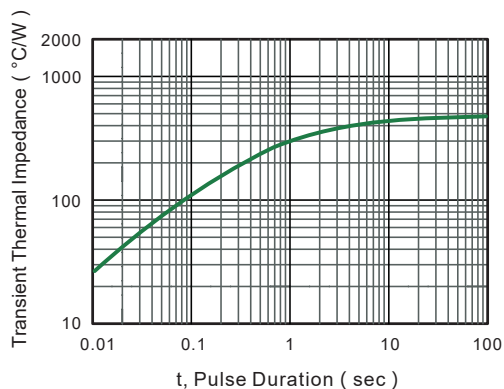
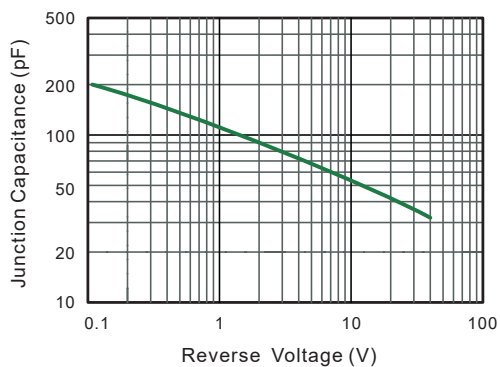
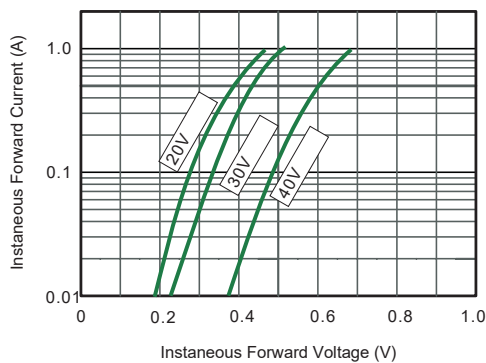
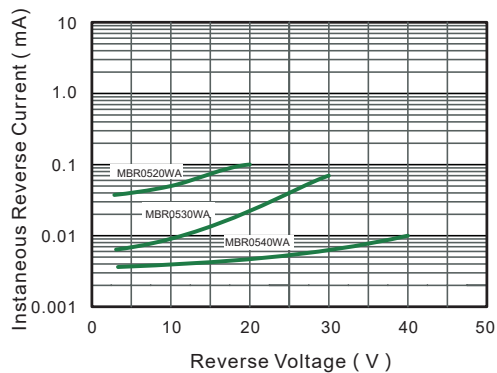
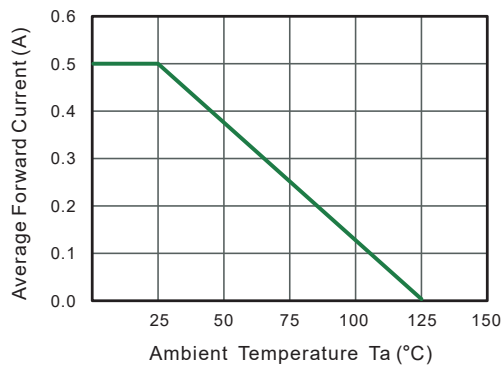
Parameter	Symbols	MBR0520WA	MBR0530WA	MBR0540WA	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Average Forward Current at $T_A = 25^\circ\text{C}$	I_O	0.5			A
Non-repetitive Peak Forward Surge Current At $t = 8.3\text{ ms}$	I_{FSM}	5.5			A
Maximum Instantaneous Forward Voltage at $I_F = 0.1\text{ A}$ at $I_F = 0.5\text{ A}$	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
Typical Thermal Resistance	$R_{\theta JA}$	500			$^\circ\text{C/W}$
Junction Temperature Range	T_J	-55 to +125			$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150			$^\circ\text{C}$



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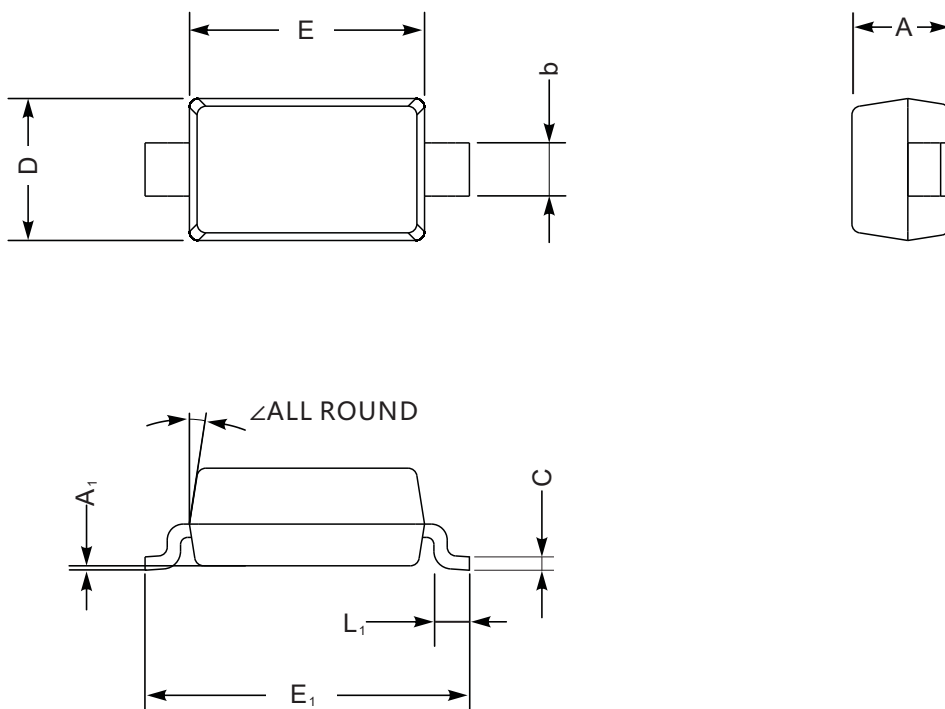
Typical Characteristic Curves



Package Outline

SOD-123W

Dimensions in mm



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	—	