

Features

- Low Forward Voltage
- Lead Free Finish/RoHS Compliant
- For Surface Mount Application and High Current Capability

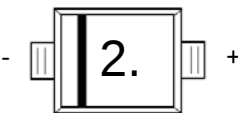
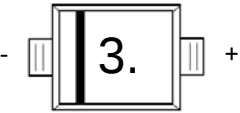
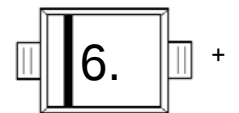


SOD-323 top view



Schematic diagram

Marking

MBRX0520:2.	MBRX0530:3.	MBRX0540:4.	MBRX0560:6.
			

The marking bar indicates the cathode



Halogen-Free

Maximum Ratings (Ta=25°C unless otherwise noted)

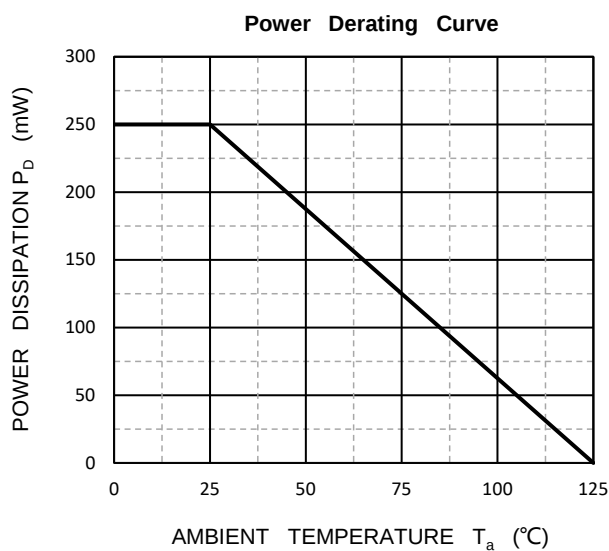
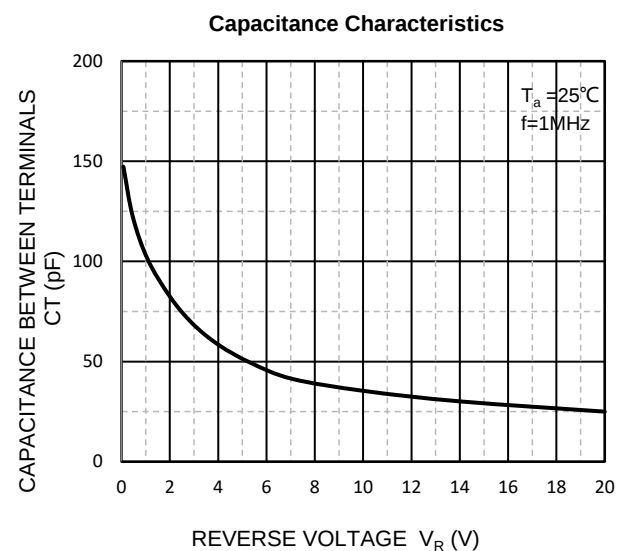
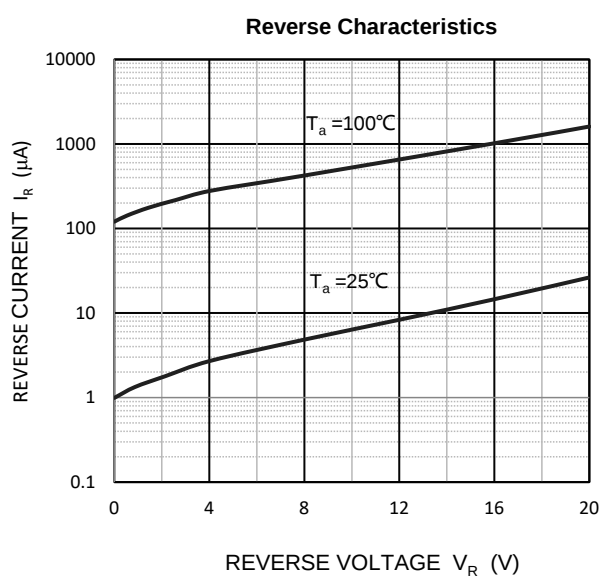
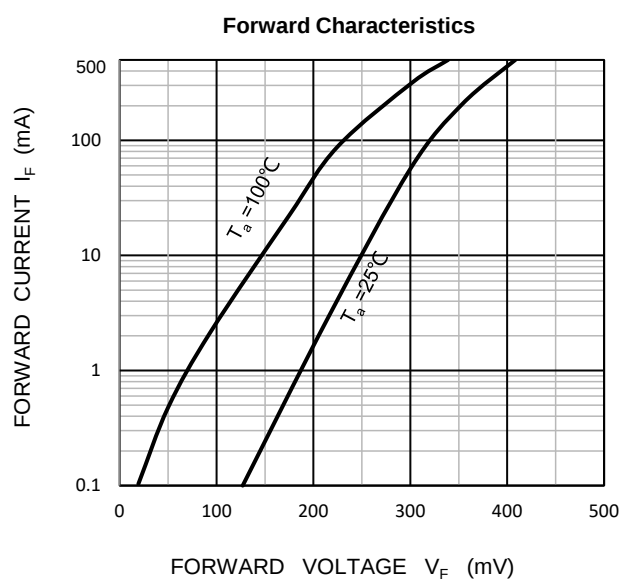
Symbol	Parameter	MBRX 0520	MBRX 0530	MBRX 0540	MBRX 0560	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	20	30	40	60	V
$V_{R(RMS)}$	RMS Reverse Voltage	14	21	28	42	
I_O	Average Rectified Output Current	0.5				A
I_{FSM}	Non-repetitive Peak Forward Surge Current@t= 8.3ms	5				A
P_D	Power Dissipation	250				mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	400				°C/W
T_J	Operating Junction Temperature Range	-40~+125				°C
T_{stg}	Storage Temperature Range	-55~+150				°C

Electrical Characteristics Ta =25°C unless otherwise specified

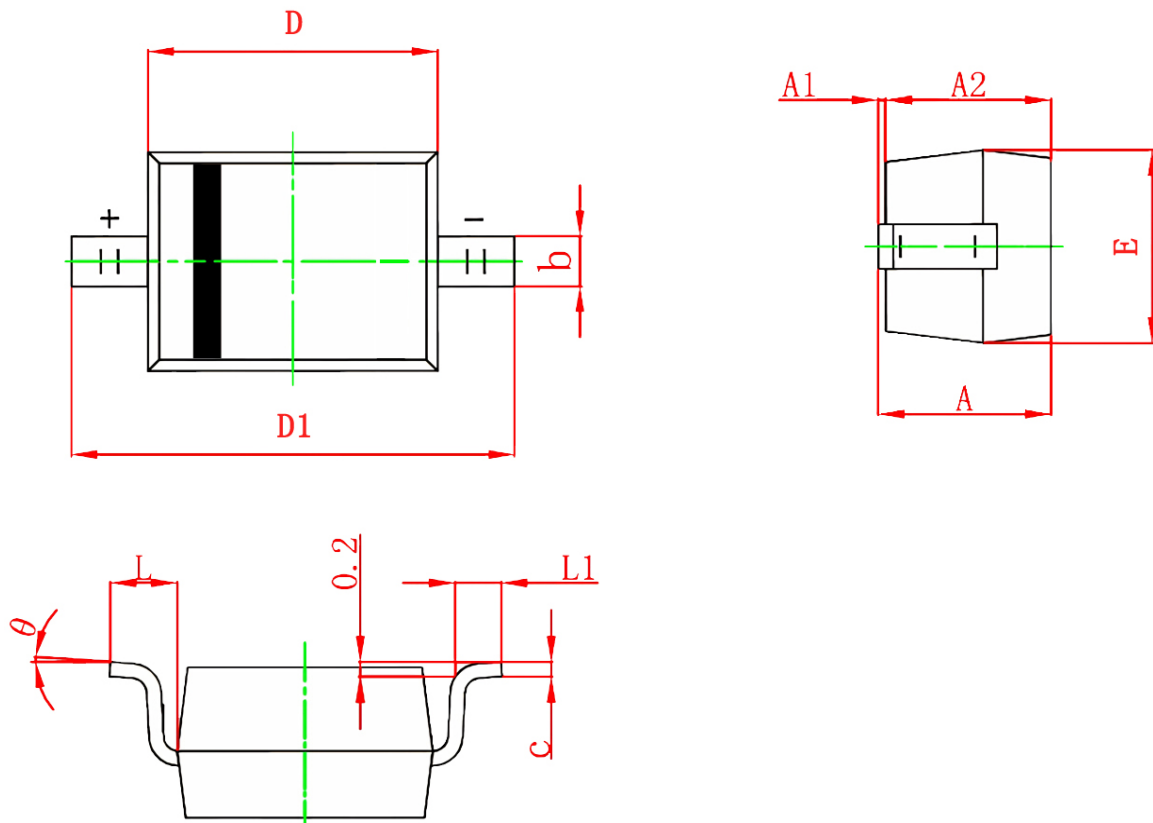
Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage MBRX0520 MBRX0530 MBRX0540 MBRX0560	$I_R=1mA$	20 30 40 60	--	--	V
I_R	Reverse current MBRX0520 MBRX0530 MBRX0540 MBRX0560	$V_R=20V$ $V_R=30V$ $V_R=40V$ $V_R=60V$	-- -- -- --	-- -- -- --	0.08	mA
V_F	Forward voltage MBRX0520 MBRX0530 MBRX0540 MBRX0560	$I_F=0.5A$	--	--	0.45	V
			--	--	0.55	
			--	--	0.55	
			--	--	0.7	
C_T	Total capacitance	$V_R=4V, f=1MHz$	--	30	--	pF

Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
MBRX0520	SOD-323	2	3,000	45,000	180,000	7"reel
MBRX0530		3	3,000	45,000	180,000	7"reel
MBRX0540		4	3,000	45,000	180,000	7"reel
MBRX0560		6	3,000	45,000	180,000	7"reel

Typical Operating Characteristics


SOD-323 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	-	1.100	-	0.043
A1	0.000	0.100	0.000	0.004
A2	0.800	1.000	0.031	0.039
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.600	1.800	0.063	0.071
D1	2.500	2.750	0.098	0.108
E	1.200	1.400	0.047	0.055
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°