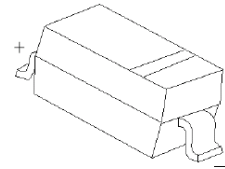


SOD-323 Plastic-Encapsulate Diodes

MBRX0520-MBRX0560 SCHOTTKY BARRIER DIODE

SOD-323



FEATURES

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

MARKING:

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

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ 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	V
I_O	Average Rectified Output Current	0.5				A
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t \leq 1\text{s}$	5				A
P_D	Power Dissipation	250				mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	400				$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	125				$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150				$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage						
MBRX0520	$V_{(BR)}$	$I_R=1\text{mA}$	20			V
MBRX0530			30			
MBRX0540			40			
MBRX0560			60			
Reverse current						
MBRX0520	I_R	$V_R=20\text{V}$			0.08	mA
MBRX0530		$V_R=30\text{V}$				
MBRX0540		$V_R=40\text{V}$				
MBRX0560		$V_R=60\text{V}$				
Forward voltage						
MBRX0520	V_F	$I_F=0.5\text{A}$			0.45	V
MBRX0530					0.55	
MBRX0540					0.55	
MBRX0560					0.70	
Total capacitance	C_T	$V_R=4\text{V}, f=1\text{MHz}$			30	pF