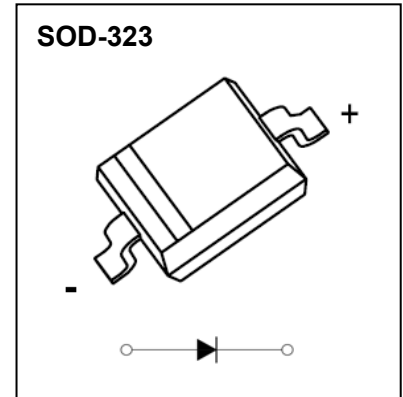


SOD-323 Plastic-Encapsulate Diodes

FEATURES

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



MARKING

TKMBRX0520 :2.	TKMBRX0530 :3.	TKMBRX0540 :4.	TKMBRX0560 :6.

The marking bar indicates the cathode

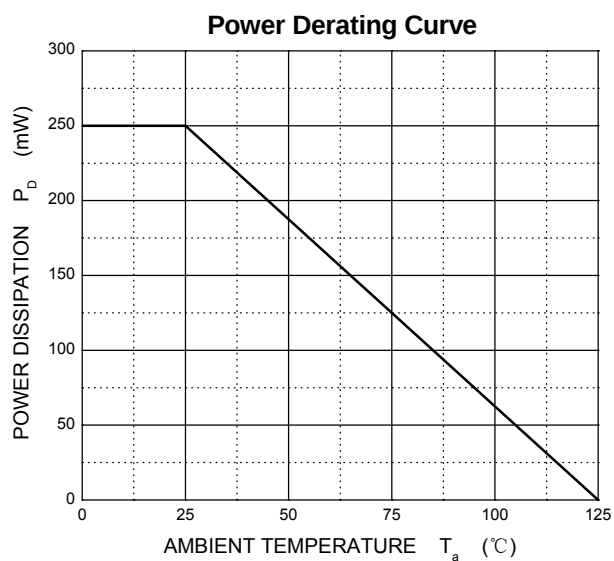
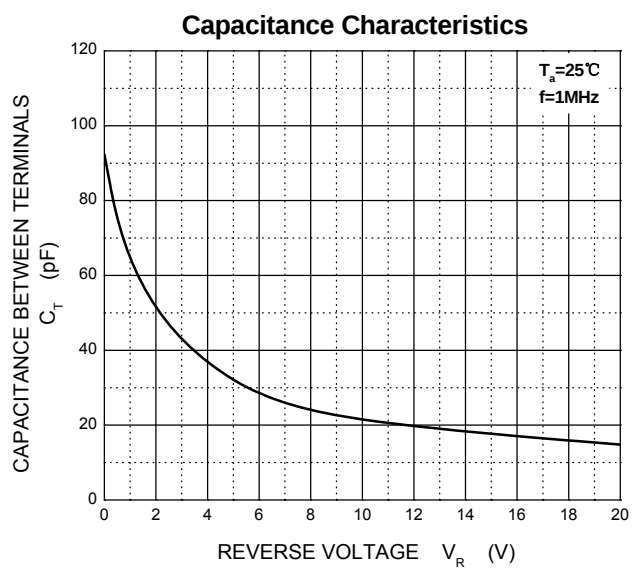
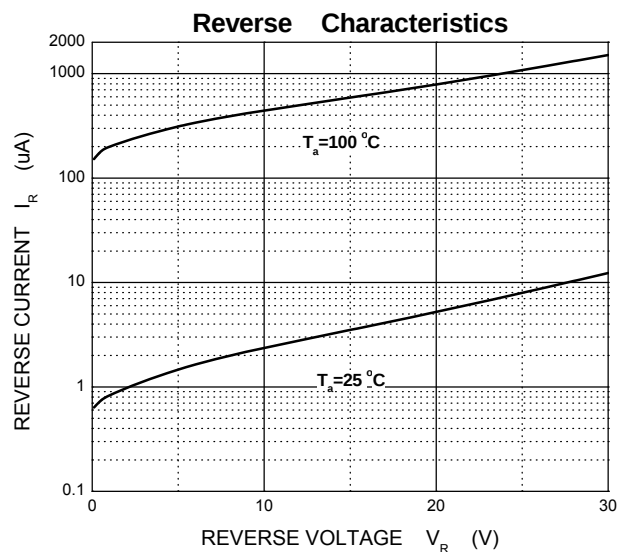
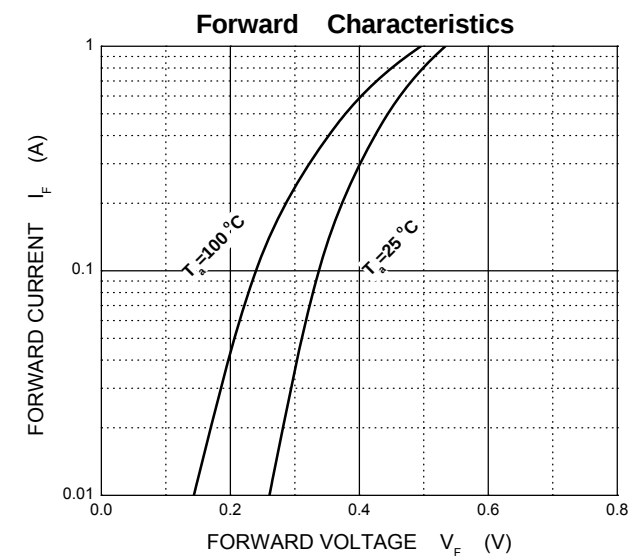
MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

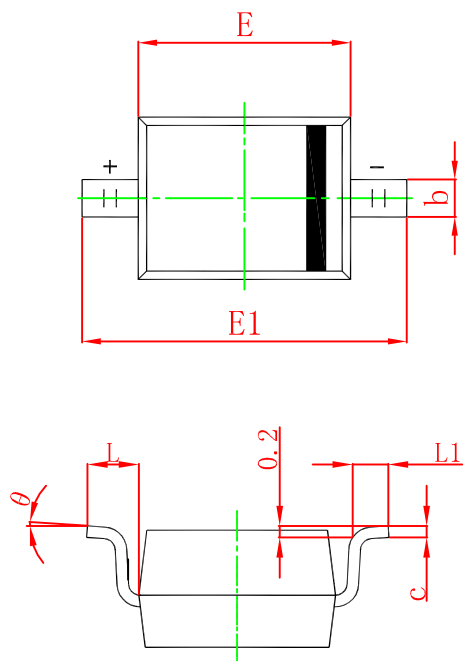
Symbol	Parameter	TKMBRX 0520	TKMBRX 0530	TKMBRX 0540	TKMBRX 0560	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	20	30	40	60	V
$V_{R(RMS)}$	RMS Reverse Voltage	14	21	28	42	V
I_o	Average Rectified Output Current	0.5				A
I_{FSM}	Non-repetitive Peak Forward Surge Current@t=8.3ms	5				A
P_D	Power Dissipation	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 °C unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage						
TKMBRX0520	$V_{(BR)}$	$I_R=1mA$	20			V
TKMBRX0530			30			
TKMBRX0540			40			
TKMBRX0560			60			
Reverse current						
TKMBRX0520	I_R	$V_R=20V$			0.08	mA
TKMBRX0530		$V_R=30V$				
TKMBRX0540		$V_R=40V$				
TKMBRX0560		$V_R=60V$				
Forward voltage						
TKMBRX0520	V_F	$I_F=0.5A$			0.45	V
TKMBRX0530					0.55	
TKMBRX0540					0.55	
TKMBRX0560					0.70	
Total capacitance	C_T	$V_R=4V, f=1MHz$		30		pF

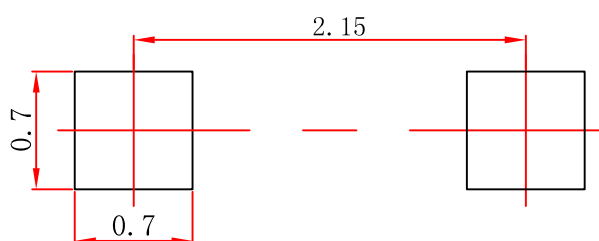
Typical Characteristics





Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

SOD-323 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.