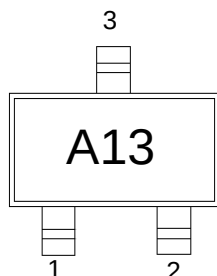
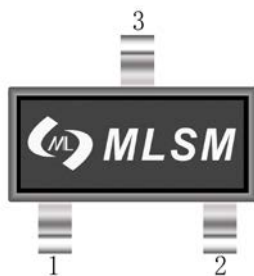


Features

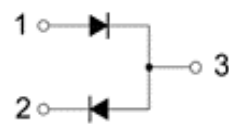
- Low Leakage
- High Conductance



Marking and pin assignment



SOT-23 top view



Schematic diagram



Halogen-Free

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

Symbol	Parameter	Value	Unit
V_R	DC Blocking Voltage	200	V
I_{FM}	Peak Forward Current	700	mA
I_o	Continuous Forward Current	200	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2	A
P_D	Power Dissipation	350	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	357	$^{\circ}\text{C/W}$
T_J, T_{STG}	Operating and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

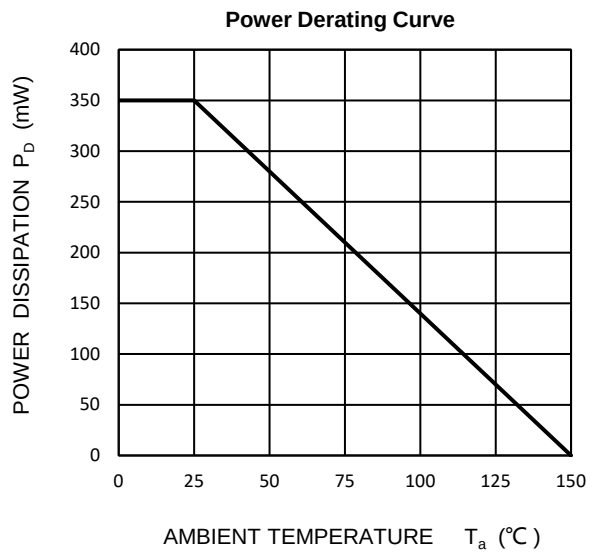
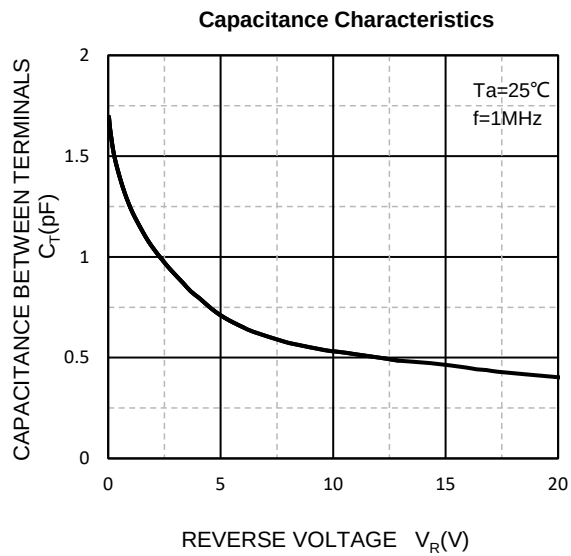
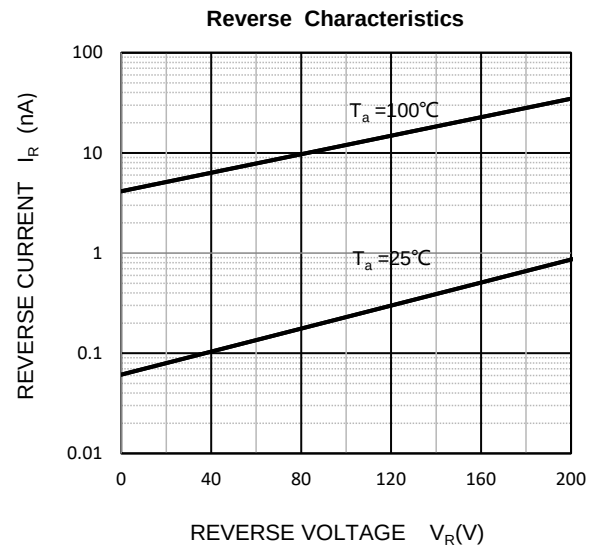
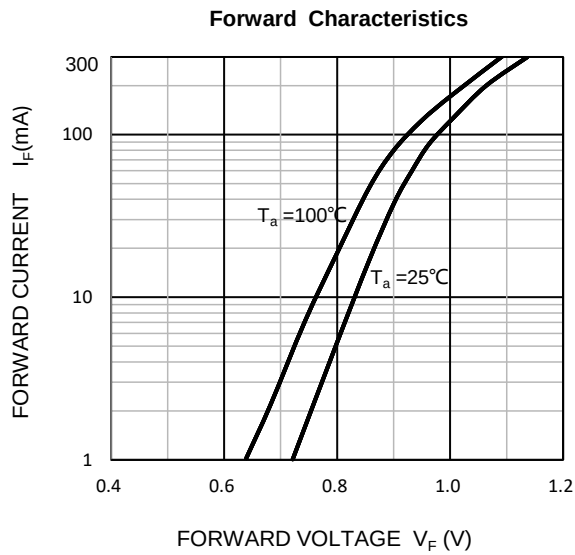
ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage	$I_R=5\mu\text{A}$	200	--	--	V
I_R	Reverse current	$V_R=180\text{V}$	--	--	10	nA
V_F	Forward voltage	$I_F=1\text{mA}$	--	--	0.75	V
		$I_F=10\text{mA}$	--	--	0.85	
		$I_F=50\text{mA}$	--	--	0.95	
		$I_F=100\text{mA}$	--	--	1.10	
		$I_F=200\text{mA}$	--	--	1.30	
		$I_F=300\text{mA}$	--	--	1.50	
C_T	Capacitance between terminals	$V_R=0, f=1\text{MHz}$	--	--	4	pF

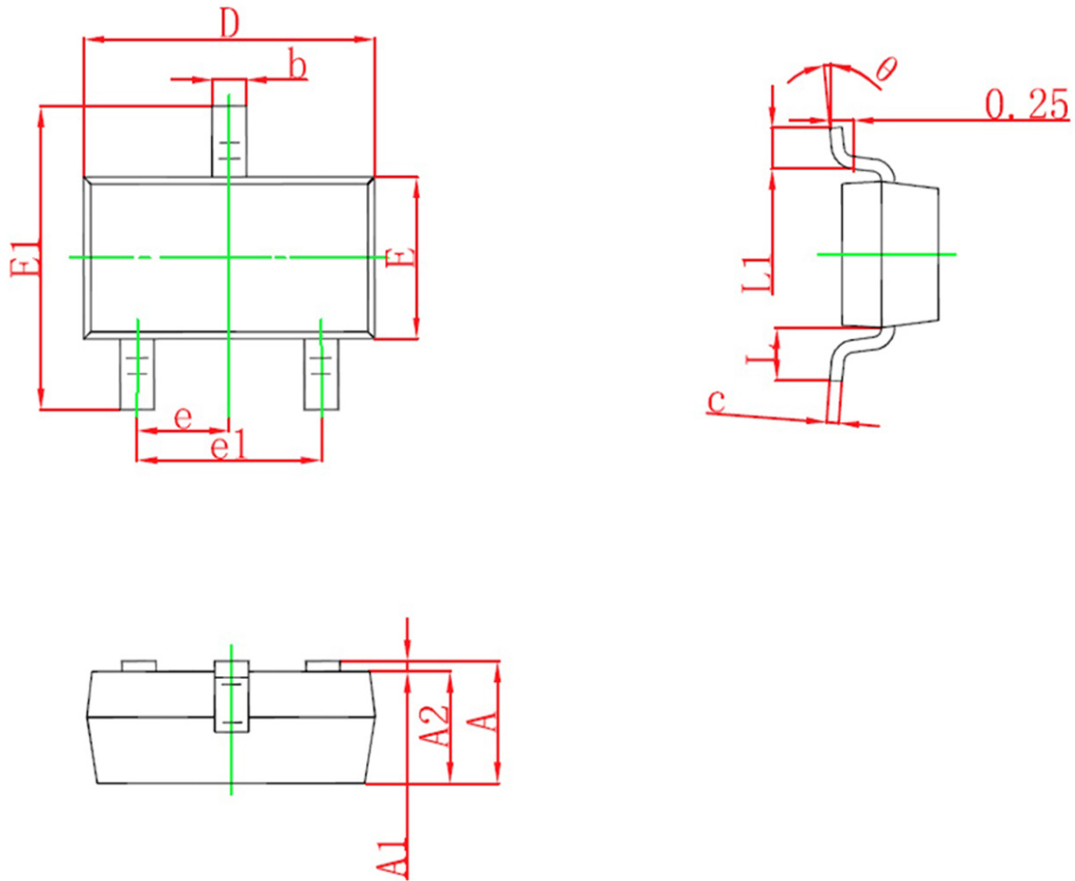
Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
MMBD1503A	SOT-23	A13	3,000	45,000	180,000	7"reel

Typical Operating Characteristics



SOT-23 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E1	2.250	2.550	0.088	0.100
E	1.200	1.400	0.047	0.055
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°