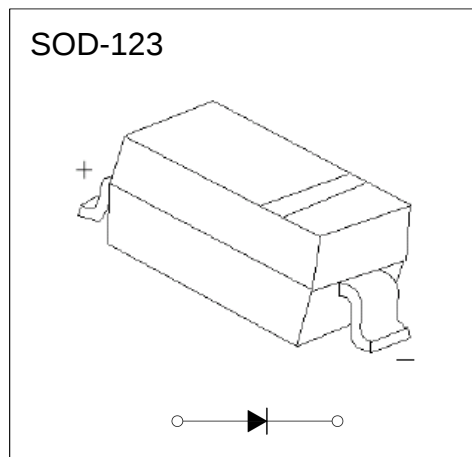


■ Features

- High Current Capability
- Low Forward Voltage Drop

■ Mechanical Data

- package:SOD-123
- Polarity: Color band denotes cathode end
- Flammability rating of epoxy resin: UL 94V-0
- Mounting Position: Any.



■ Ordering Information

Part Number	Package	Marking	Packing	Quantity per reel	Reel Size
MBR0520T1G	SOD-123	SD	Tape & Reel	3,000 PCS	7 inches
MBR0530T1G	SOD-123	SE	Tape & Reel	3,000 PCS	7 inches
MBR0540T1G	SOD-123	SF	Tape & Reel	3,000 PCS	7 inches

■ Maximum Ratings & Thermal Characteristics(Ratings at 25℃ ambient temperature unless otherwise specified.)

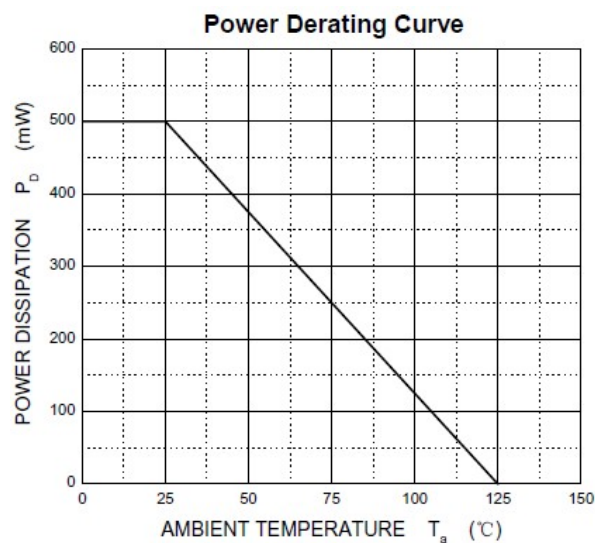
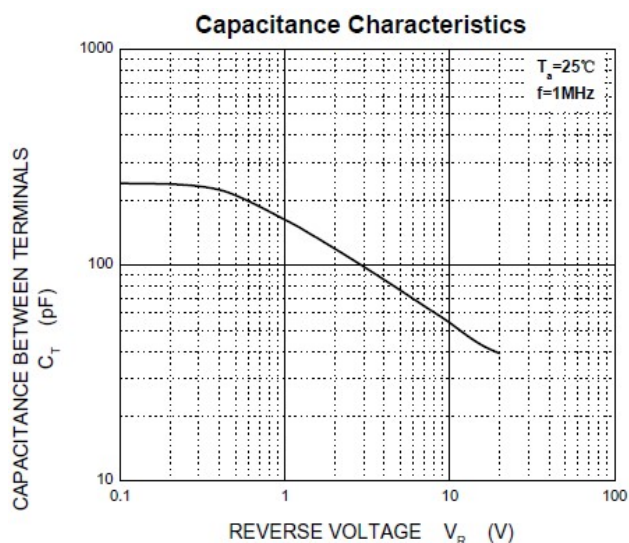
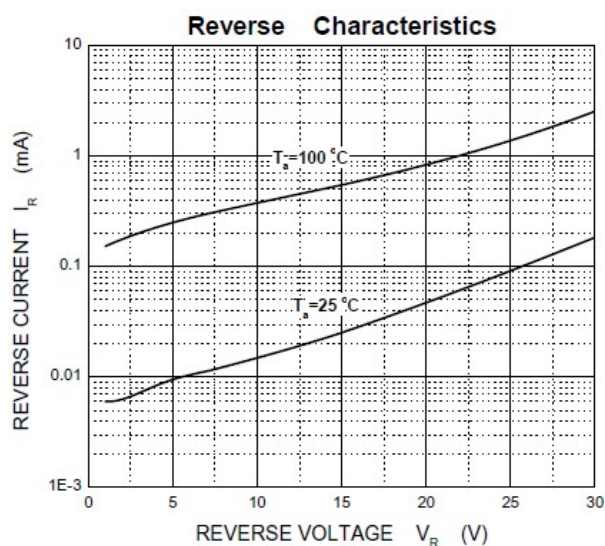
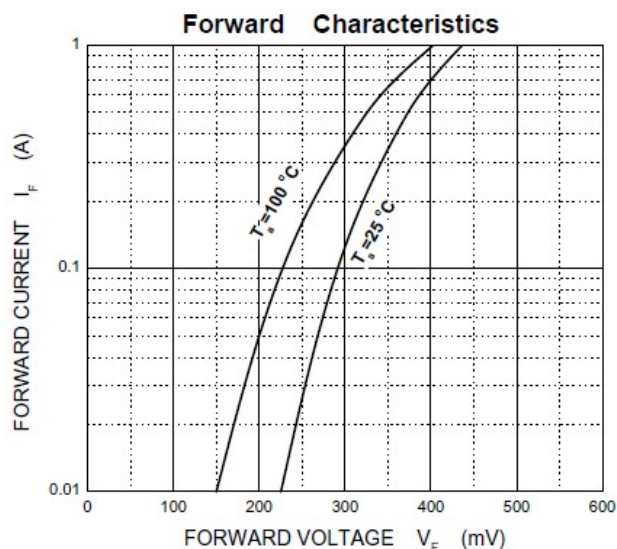
Parameters	Symbol	MBR0520T1G	MBR0530T1G	MBR0540T1G	Unit
Maximum repetitive peak reverse voltage	VRRM	20	30	40	V
Maximum RMS voltage	VRMS	14	21	28	V
Maximum DC blocking voltage	VDC	20	30	40	V
Maximum average forward rectified current	IFM	0.5			A
Peak forward surge current 8.3 ms single half sine-wave	IFSM	5.5			A
Typical thermal resistance	RθJA	200			℃/W
Power Dissipation	PD	500			mW
Storage temperature range	TSTG	-50~+150			℃
Voltage rate of change	Dv/dt	1000			V/μS



■ Electrical Characteristics(Ratings at 25 °C ambient temperature unless otherwise specified)

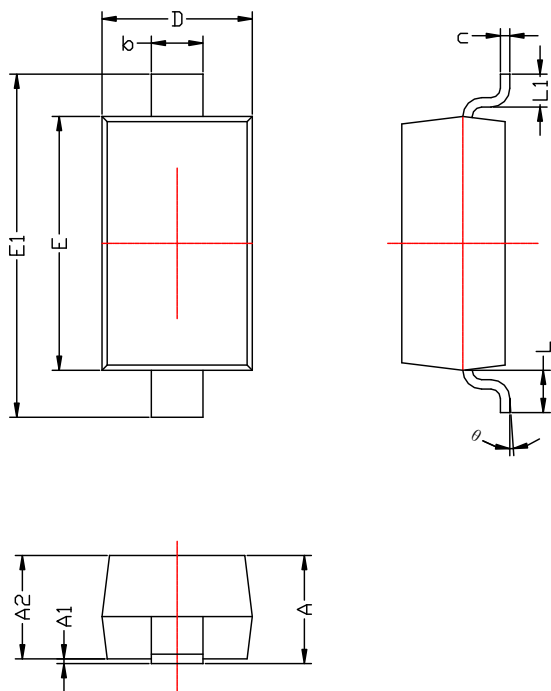
Parameters	Symbol	Test conditions	MBR0520T1G	MBR0530T1G	MBR0540T1G	Unit
Maximum forward voltage	VF	IF = 0.1A	0.330	0.375	---	V
		IF = 0.5A	0.385	0.430	0.510	
		IF = 1.0A	---	---	0.620	
Maximum reverse breakdown voltage	VR	IR=250uA	20	---	---	V
		IR=200uA	---	30	---	
		IR=20.0uA	---	---	40	
Maximum reverse current	IR	VR=10V	75	---	---	uA
		VR=15V	---	20	---	
		VR=20V	250	---	10	
		VR=30V	---	130	---	
		VR=40V	---	---	20	
Capacitance between terminals	CT	VR = 0V, f = 1MHz			170	pF

■ Typical Characteristics





■ SOD-123 Package Outline Dimensions



Symbol	Dimensions	
	MIN	MAX
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.080	0.150
D	1.500	1.700
E	2.600	2.800
E1	3.550	3.850
L	0.500REF	
L1	0.250	0.450
θ	0°	8°