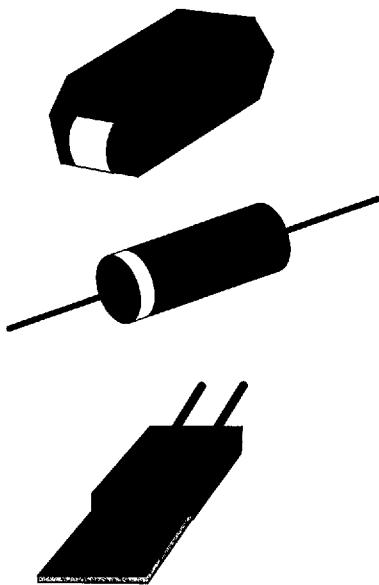


SMB, SB & MBR Series

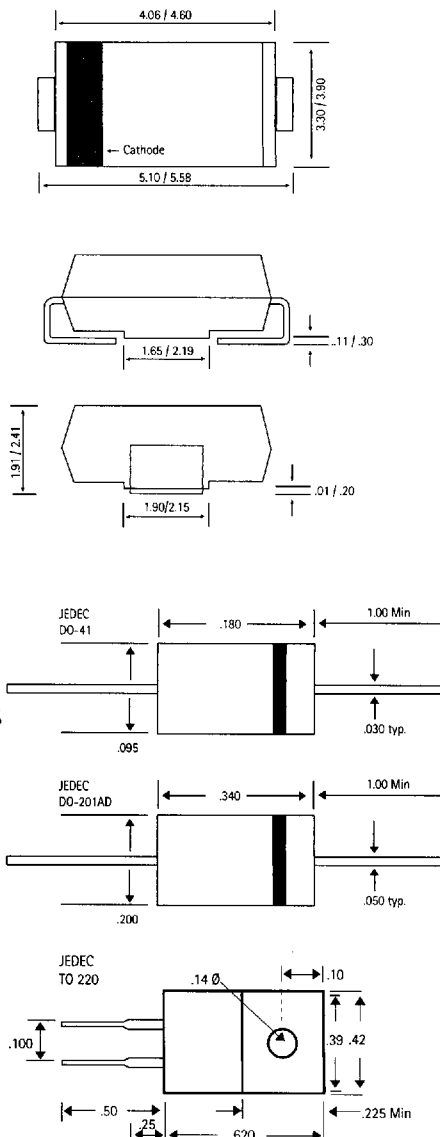
SMB, SB & MBR Series

1, 3, 5 & 10 AMP HIGH VOLTAGE SCHOTTKY BARRIER RECTIFIERS

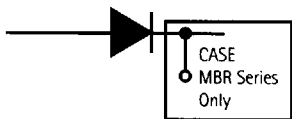
Description



Mechanical Dimensions



Electrical Characteristics



Features:

- High Surge Voltage and transient protection
- Meets or Exceeds UL Flammability Specification 94V-0
- High Efficiency with Low Power loss
- High Current Capability with Low Vf

SMB, SB & MBR Series

Maximum Ratings

Electrical Characteristics @ 25°C

		SMB,SB & MBR Series							
		1 Amp	3 Amp	5 Amp	10 Amp	Units			
V_{RRM}	Max. Repetitive Peak Reverse Voltage	90	100	90	100	90	100	90	100 Volts
V_{RWM}	Working Peak Reverse Voltage	90	100	90	100	90	100	90	100 Volts
V_{DC}	Maximum DC Blocking Voltage	90	100	90	100	90	100	90	100 Volts
(I_{AV})	Max. Average Forward Rectified Current @ $T_c = 135$ Deg. C.	1.0	3.0	5.0	10.0	Volts			
I_{FSM}	Peak Forward Surge Current (8.3ms single half sine-wave) superimposed on rated load - JEDEC Method)	50.0	150.0	150.0	20.0	Amps			
I_{RSM}	Peak Repetitive Surge Current (2.0us, 1KHZ)	1.0	1.0	1.0	1.0	Amps			
V_{JUS}	Voltage Rate of Change, dv/dt (rated Vr)	10.0	1000	1000	1000	Amps			
V_F	Maximum Forward Voltage (Note 1) @ 25 Deg. C.	.79	.79	.78	.78	If=10A, Vf=.80V V _{LS}			
	@ 100 Deg. C.	.69	.69	.68	.68	@ 100 Deg. C If=20A, Vf=.95V If=10A, Vf=.70V			
	Maximum Instantaneous Reverse Current at								
V_F	Peak Reverse Voltage $T_c = 100$ Deg. C. (Note 1)	5.0	.60	20	25.0	ma			
V_F	Peak Reverse Voltage $T_c = 25$ Deg. C. (Note 1)	5.0	.10	0.6	.10	ma			
R_{JOL}	Maximum Thermal Resistance Junction to Lead	15.0	1.0	15.0	2.0	°C/W			
T_C	Maximum Operating Junction Temperature	←----- -65 to 150 ----->				Deg.C			
T_{STG}	Maximum Storage Temperature	←----- -65 to 150 ----->				Deg.C			

Notes:

1. Measured @ 1 MHz and applied reverse voltage of 4.0V.

SMB, SB & MBR Series