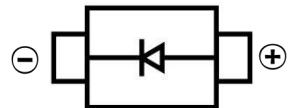


GENERAL PURPOSE RECTIFIER DIODE**FEATURES**

- Glass passivated junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Surface Mount device

**SMB****MECHANICAL DATA**

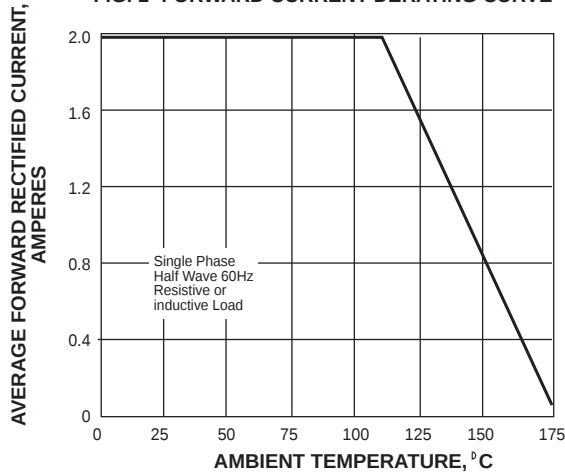
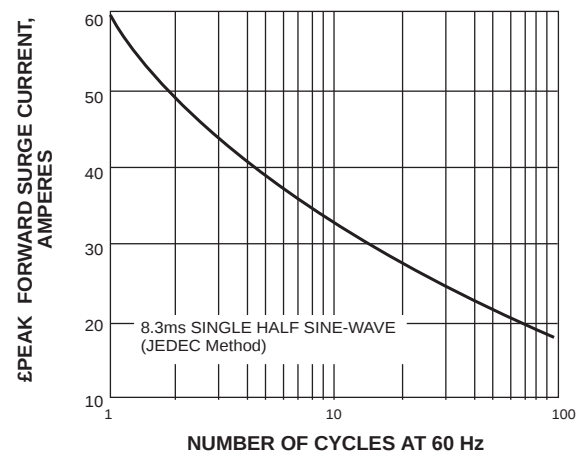
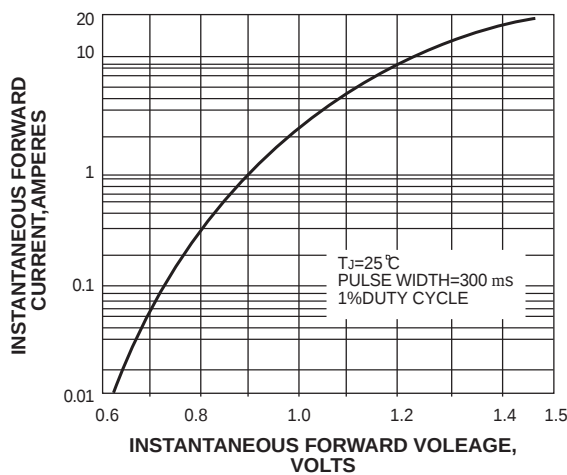
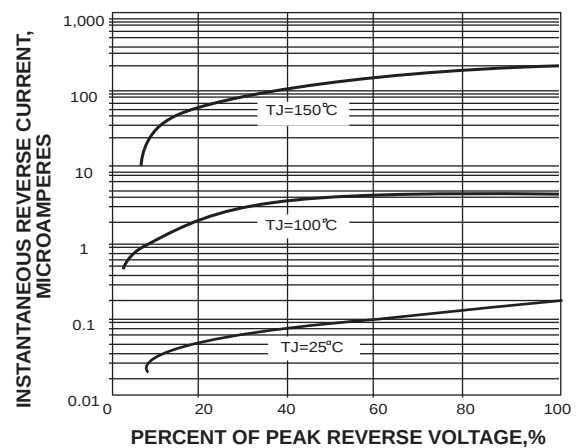
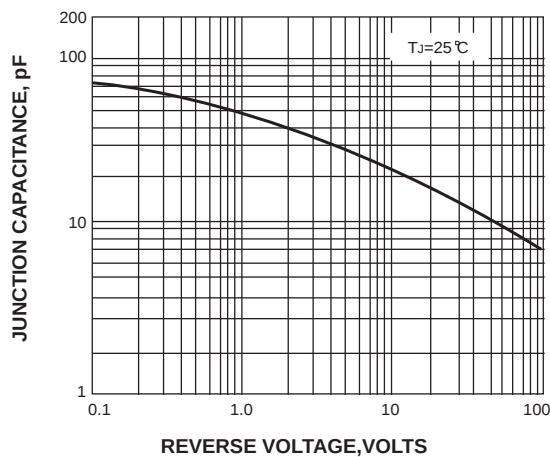
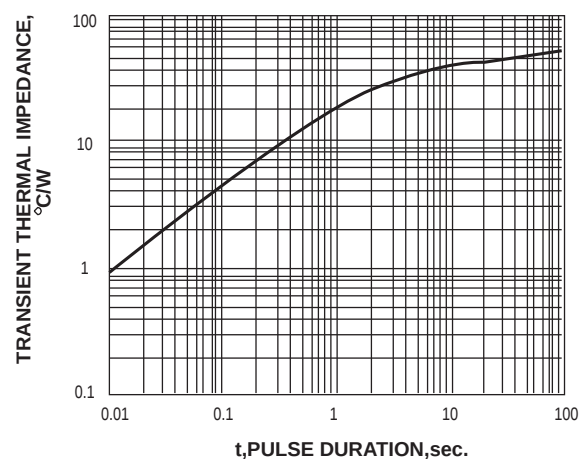
- Case: SMB(DO-214AA)
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Weight: 0.088 grams (approximate)

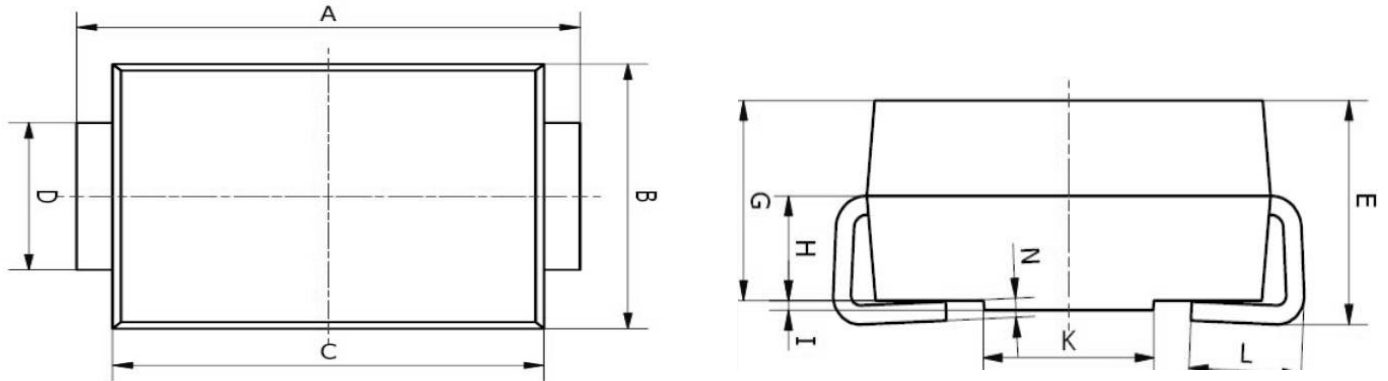
MAXIMUM RATINGS AND CHARACTERISTICS($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
DC Blocking Reverse Voltage	V_R	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	V
Maximum Average Forward Rectified Current	I_F	2	A
Non-Repetitive Peak Forward Surge Current @ $t_@=8.3\text{ms}$	I_{FSM}	60	A
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	35	$^\circ\text{C/W}$
Reverse Recovery Time(@ $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$)	t_{rr}	2.5	μs
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~+150	$^\circ\text{C}$

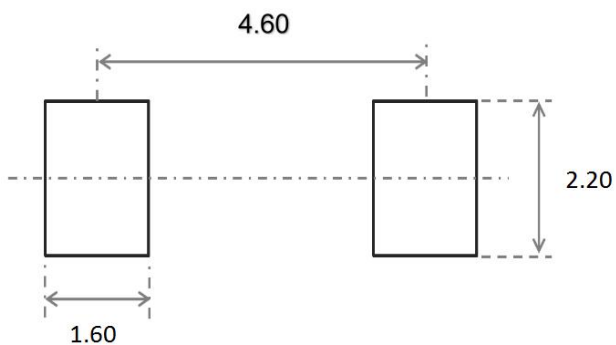
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_F		1.0	1.1	V	$I_F=2\text{A}$
Reverse current	I_R			5	μA	$V_R=100\text{V}$
Diode capacitance	C_D		30		pF	$V_R=4\text{V}$, $f=1\text{MHz}$

GENERAL PURPOSE RECTIFIER DIODE**Typical Characteristics****FIG. 1- FORWARD CURRENT DERATING CURVE****FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT****FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS****FIG. 4-TYPICAL REVERSE CHARACTERISTICS****FIG. 5-TYPICAL JUNCTION CAPACITANCE****FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE**

GENERAL PURPOSE RECTIFIER DIODE**SMB Package Outline Dimensions**

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	5.00	5.45	0.197	0.215
B	3.20	4.00	0.126	0.157
C	4.30	4.70	0.169	0.185
D	1.80	2.20	0.071	0.087
E	2.20	2.50	0.087	0.098
G	1.90	2.30	0.075	0.090
H	0.95	1.25	0.037	0.049
I	0.05	0.15	0.002	0.006
K	1.70	2.10	0.067	0.083
L	0.90	1.60	0.035	0.063
N	0.10	0.30	0.004	0.012

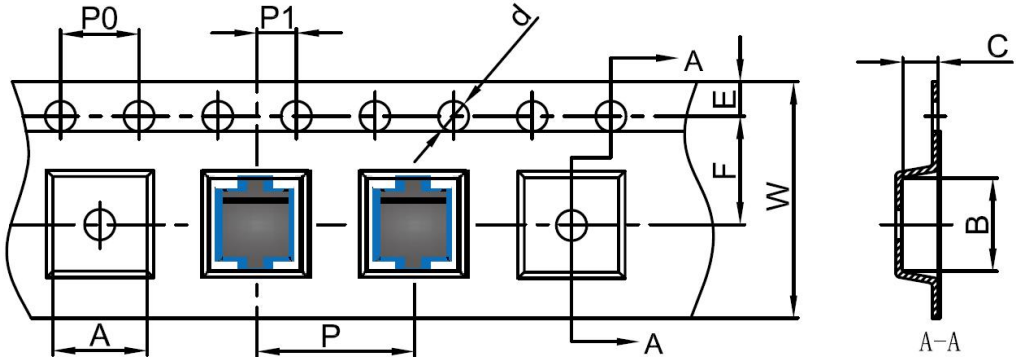
SMB Suggested Pad Layout**Note:**

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

GENERAL PURPOSE RECTIFIER DIODE

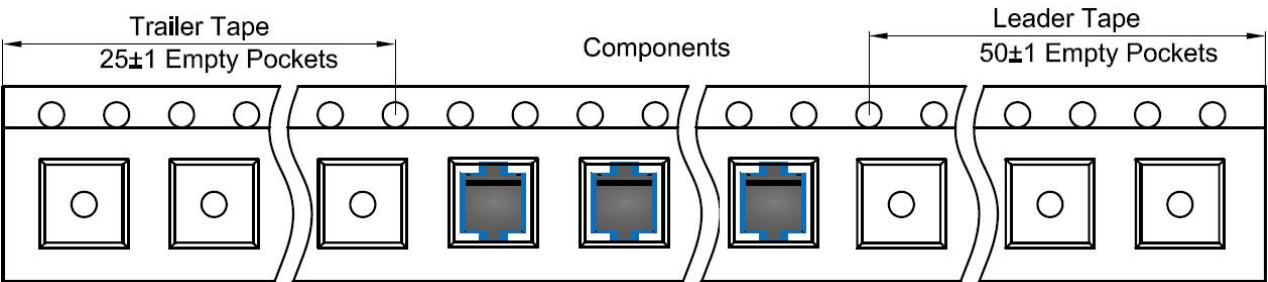
SMB Tape and Reel

SMB Embossed Carrier Tape

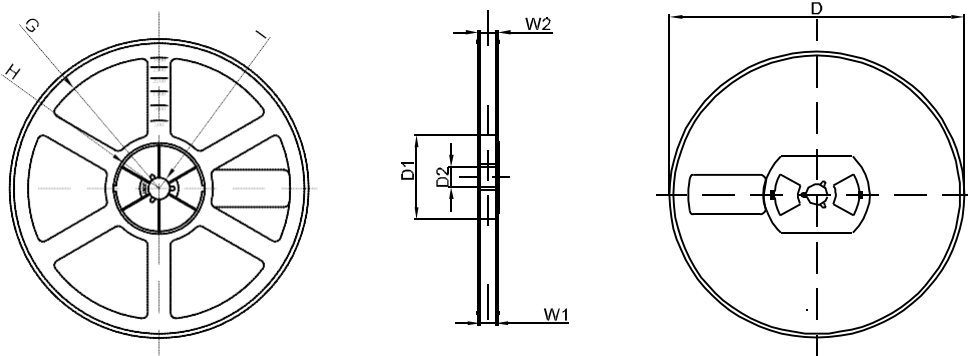


	DIMENSIONS ARE IN MILLIMETER									
TYPE	A	B	C	d	E	F	P0	P	P1	W
SMB	4.10	5.50	2.58	Ø1.50	1.75	5.50	4.00	8.00	2.00	12.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

SMB Tape Leader and Trailer



SMB Reel



	DIMENSIONS ARE IN MILLIMETER							
REEL OPTION	D	D1	D2	G	H	I	W1	W2
13" DIA	Ø330	75.0	13.00	R165	R37.50	R6.50	12.40	17.60
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1