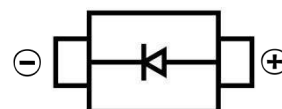


**FAST RECOVERY RECTIFIER DIODE**
**FEATURES**

- Low reverse leakage current
- Low forward voltage drop, Low power loss
- High current capability
- Surface Mount device


**SMB**

**MECHANICAL DATA**

- Case: SMB(DO-214AA)
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.088 grams (approximate)

**MAXIMUM RATINGS AND CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise noted)**

Parameter	SYMBOLS MARKING	MURS 120	MURS 140	MURS 160	MURS 180	MURS 1100	Unit
Marking	/	MUR120	MUR140	MUR160	MUR180	MUR1100	/
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	200	400	600	800	1000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	1.0					A
Non-repetitive peak forward surge current 8.3 ms single half sine-wave	I <sub>FSM</sub>	30			20		A
@I <sub>F</sub> =1.0A Maximum forward voltage	V <sub>F</sub>	0.875	1.250		1.700		V
@V <sub>DC</sub> Maximum reverse current	I <sub>R</sub>	5 100					μA
I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A J <sub>RR</sub> =0.25A MAX. reverse recovery time	T <sub>RR</sub>	25	50		75		nS
Typical thermal resistance (Note 1)	R <sub>θJA</sub>	65					°C/W
V <sub>R</sub> =4.0V, f=1MHz Type junction capacitance	C <sub>J</sub>	105			90		pF
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-55 --- +150					°C

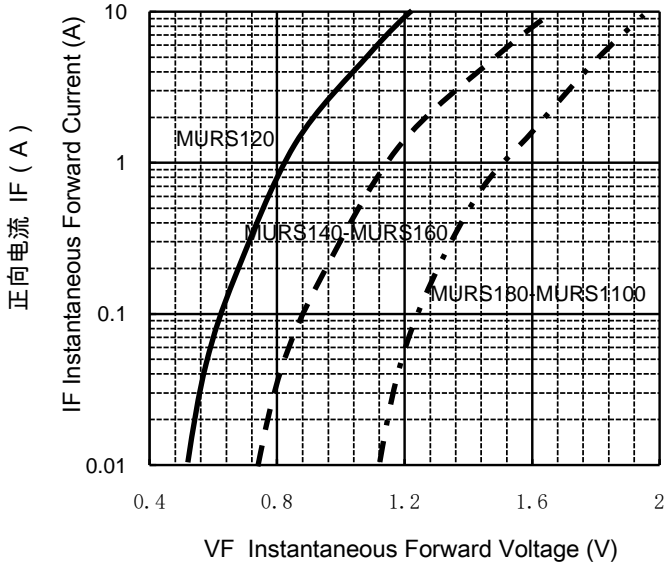
Note:

1) Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted.

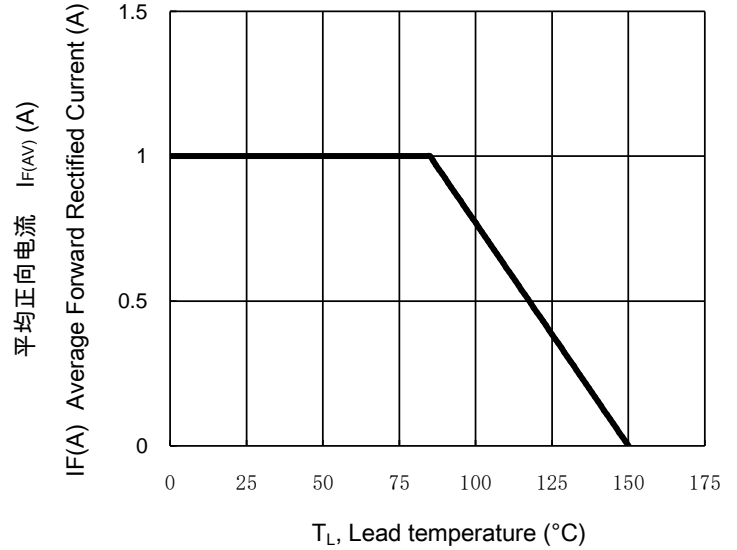
FAST RECOVERY RECTIFIER DIODE

Typical Characteristics

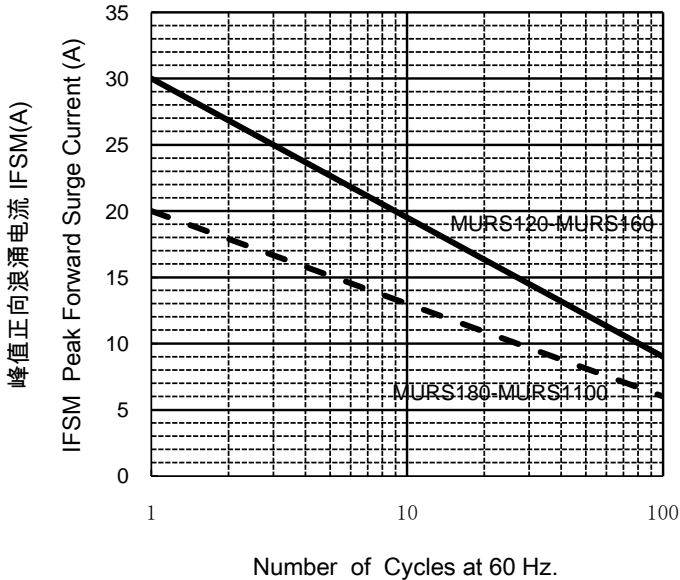
TYPICAL FORWARD CHARACTERISTIC



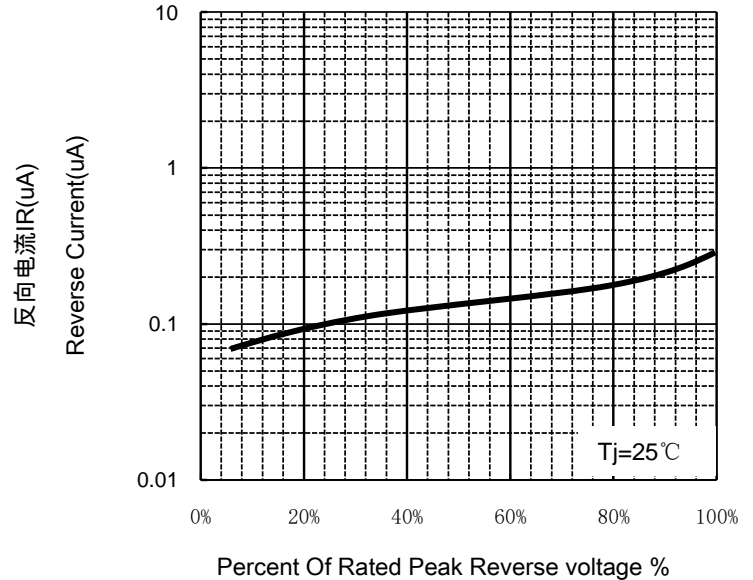
FORWARD CURRENT DERATING CURVE

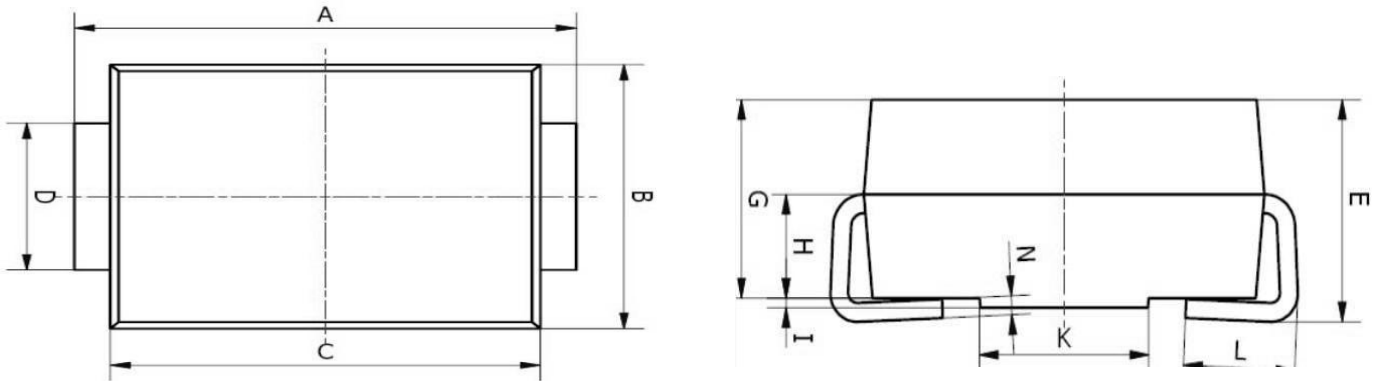


MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT

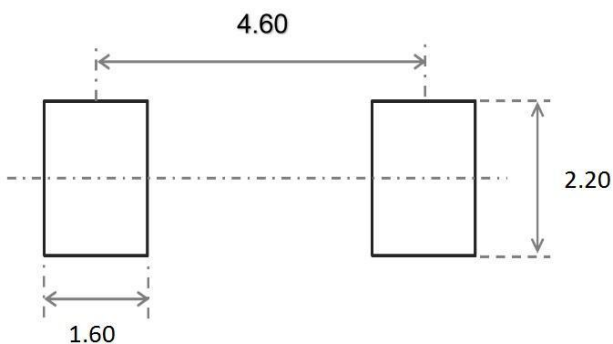


Typical Reverse Characteristics

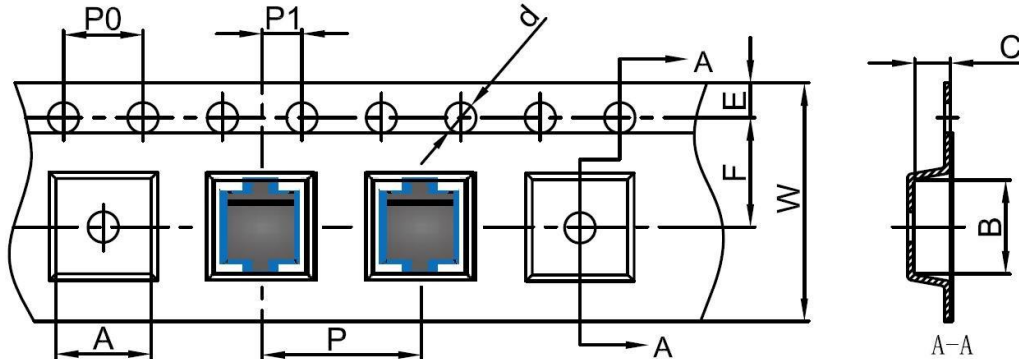


**FAST RECOVERY RECTIFIER DIODE**
**SMB Package Outline Dimensions**


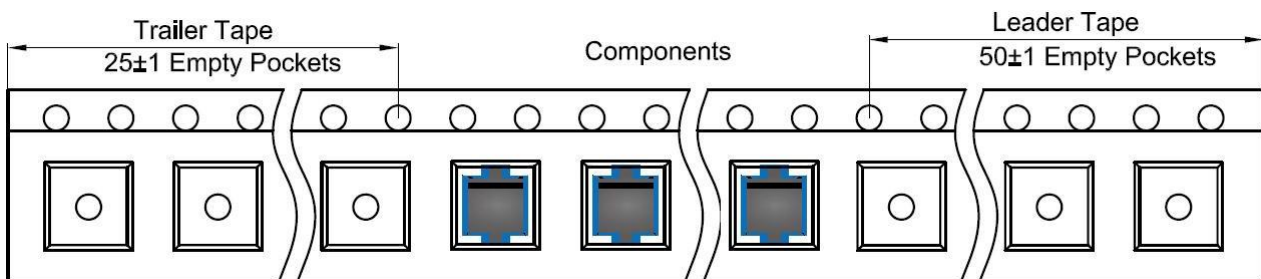
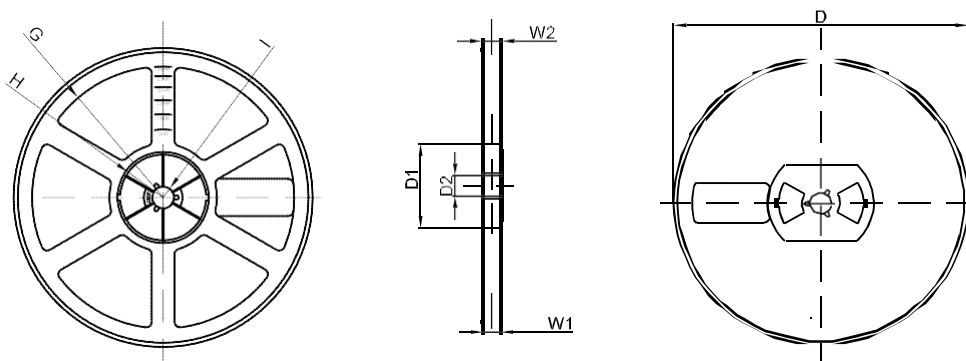
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	5.00	5.45	0.197	0.215
B	3.20	4.00	0.126	0.157
C	4.30	4.70	0.169	0.185
D	1.80	2.20	0.071	0.087
E	2.20	2.50	0.087	0.098
G	1.90	2.30	0.075	0.090
H	0.95	1.25	0.037	0.049
I	0.05	0.15	0.002	0.006
K	1.70	2.10	0.067	0.083
L	0.90	1.60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

**FAST RECOVERY 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