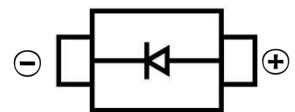


SCHOTTKY BARRIER RECTIFIER**FEATURES**

- Excellent Ability to Withstand Reverse Avalanche Energy Transients
- Guard-Ring for Stress Protection
- For low voltage, high frequency rectification applications
- For free wheeling and polarity protection diodes applications
- Surface Mount device

**SMC****MECHANICAL DATA**

- Case: SMC(DO-214AB)
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.21 grams (approximate)

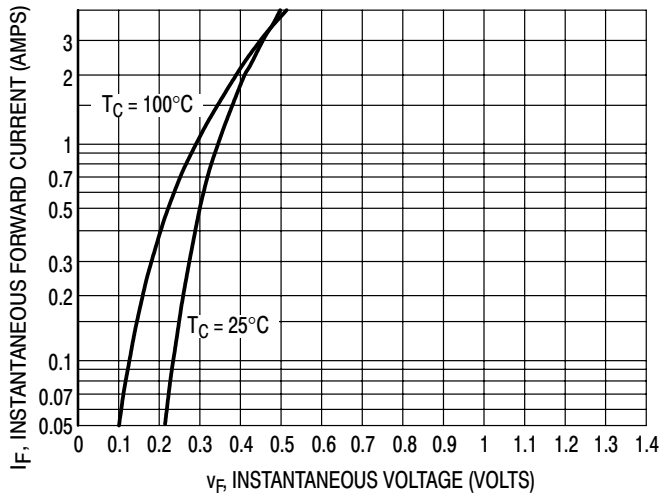
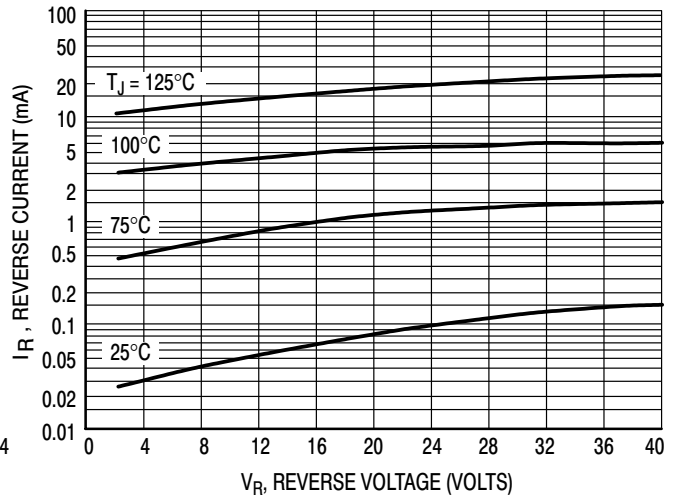
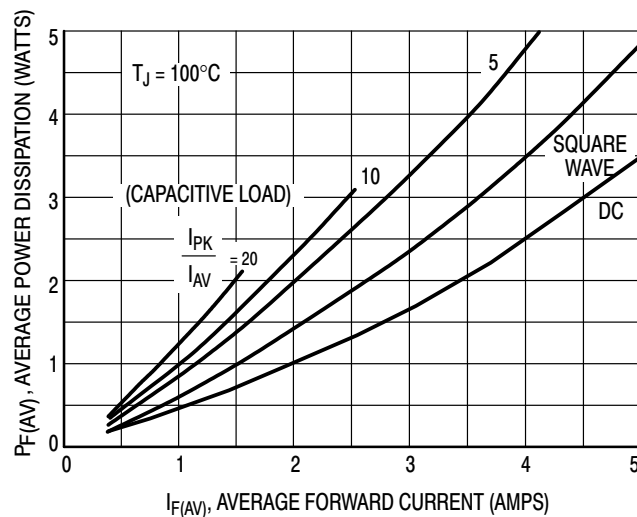
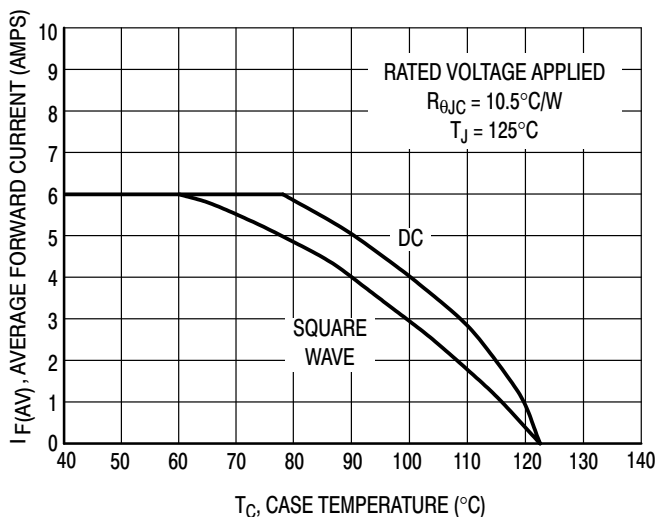
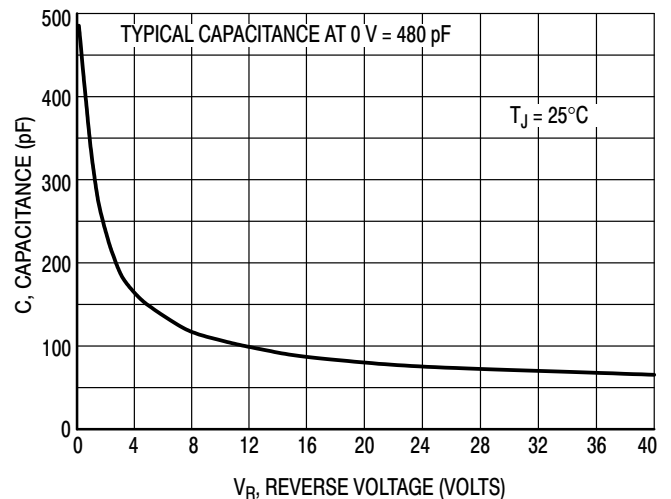
MAXIMUM RATINGS AND CHARACTERISTICS($T_A = 25^\circ\text{C}$ unless otherwise noted)

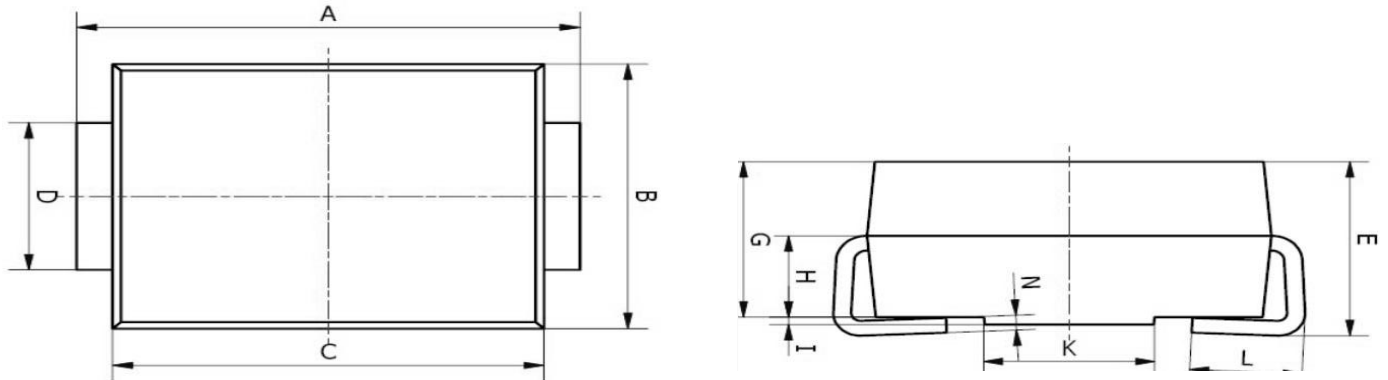
Parameter	Symbol	MBRS320	MBRS330	MBRS340	MBRS360	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	60	V
DC Blocking Reverse Voltage	V_R	20	30	40	60	V
Maximum Working Peak Reverse Voltage	V_{RWM}	20	30	40	60	V
Maximum Average Forward Rectified Current	I_F	3.0@ $T_L=100^\circ\text{C}$ 4.0@ $T_L=90^\circ\text{C}$				A
Non-Repetitive Peak Forward Surge Current @ $t@=8.3\text{ms}$	I_{FSM}	80				A
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	111				$^\circ\text{C/W}$
Thermal Resistance Junction to Lead	$R_{\theta JL}$	11				$^\circ\text{C/W}$
Junction Temperature	T_J	-65 ~ +150				$^\circ\text{C}$
Storage Temperature	T_{STG}	-65 ~ +150				$^\circ\text{C}$

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

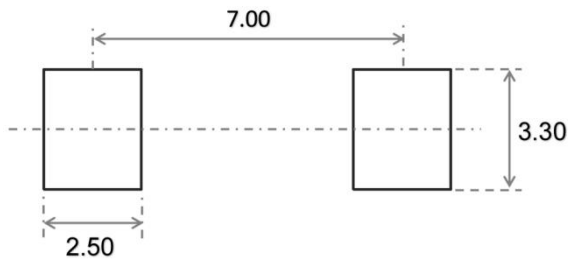
Parameter	Symbol	MBRS320	MBRS330	MBRS340	MBRS360	Unit	Conditions
Forward voltage	V_F^*	0.50	0.50	0.525	0.740	V	$I_F=3\text{A}$
Reverse current	I_R^*	2.0	2.0	2.0	0.5	mA	$V=V_R, T_J = 25^\circ\text{C}$
Reverse current	$I_{R(H)}^*$	20				mA	$V=V_R, T_J = 100^\circ\text{C}$

* Pulse Test: Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$.

SCHOTTKY BARRIER RECTIFIER**Typical Characteristics****Figure 1. Typical Forward Voltage****Figure 2. Typical Reverse Current****Figure 3. Power Dissipation****Figure 4. Current Derating (Case)****Figure 5. Typical Capacitance**

SCHOTTKY BARRIER RECTIFIER**SMC Package Outline Dimensions**

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	7.75	8.13	0.305	0.320
B	5.59	6.22	0.220	0.245
C	6.60	7.11	0.260	0.280
D	2.75	3.25	0.108	0.128
E	2.25	2.82	0.089	0.111
G	2.00	2.62	0.079	0.103
H	1.26	1.56	0.050	0.061
I	0.05	0.15	0.002	0.006
K	4.30	6.00	0.169	0.236
L	1.25	1.75	0.049	0.069
N	0.10	0.30	0.004	0.012

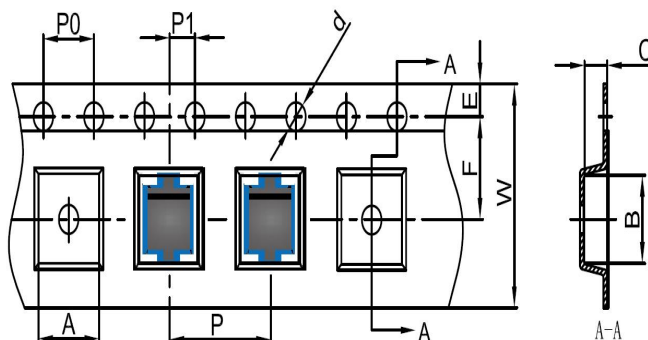
SMC Suggested Pad Layout**Note:**

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

SCHOTTKY BARRIER RECTIFIER

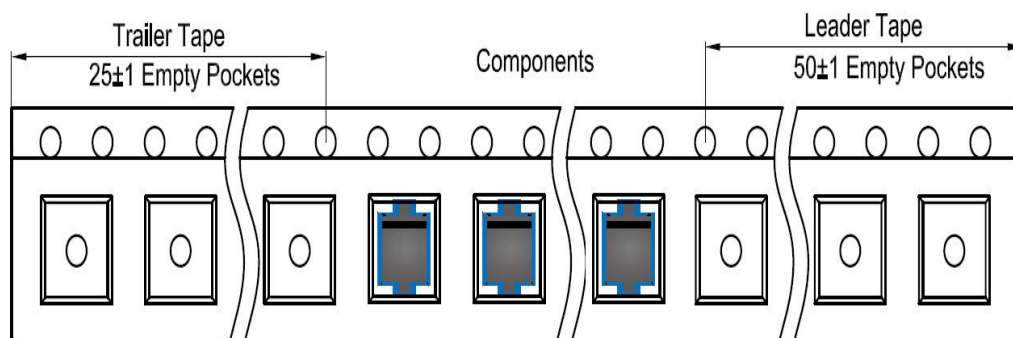
SMC Tape and Reel

SMC Embossed Carrier Tape

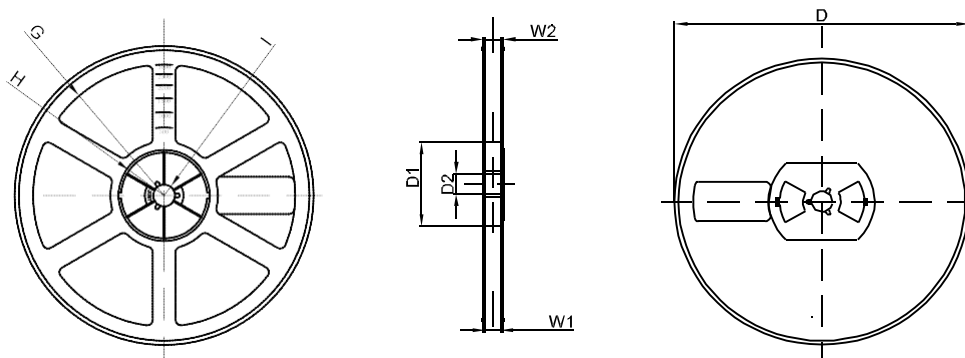


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SMC	6.3	8.25	2.90	Ø1.55	1.75	7.50	4.00	8.00	2.00	16.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

SMC Tape Leader and Trailer



SMC Reel



DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
13" DIA	Ø330	100	21	R165	R50	R6.50	16.4	21.00
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1