

GENERAL PURPOSE RECTIFIER DIODE

FEATURES

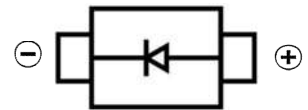
- Glass passivated junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Surface mount device



MECHANICAL DATA

- Case: SMC(DO-214AB)
- Case material: Molded plastic. UL flammability
- Classification rating: 94V-0
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Weight: 0.21 grams (approximate)

SMC



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

Parameter	Symbol	S5A	S5B	S5D	S5G	S5J	S5K	S5M	Unit
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	
Maximum average forward rectified current @T _J =75°C	I _(AV)	5.0							A
Peak forward surge current, 8.3 ms single Half sine-wave superimposed on rated load	I _{FSM}	200							
Typical junction capacitance	C _J	100							pF
Operating and storage temperature range	T _J ,T _{STG}	-55 ~ +150							°C

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

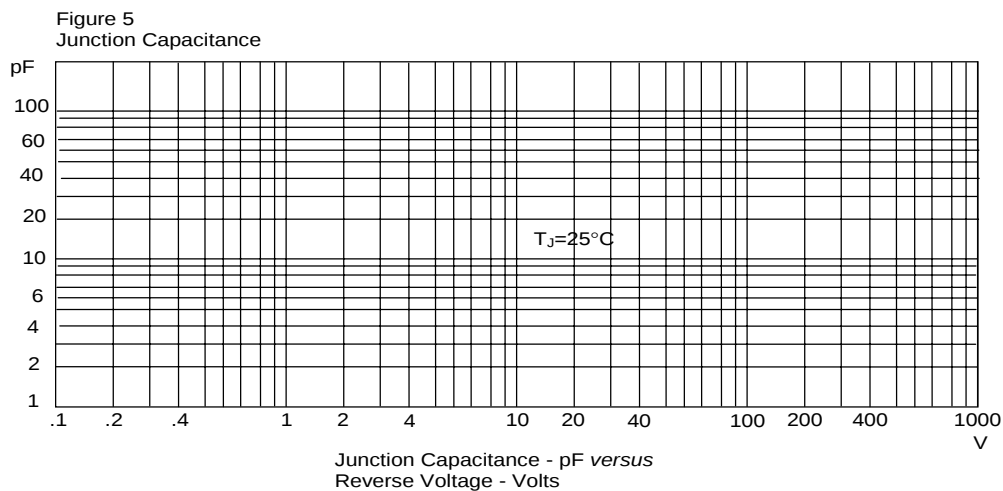
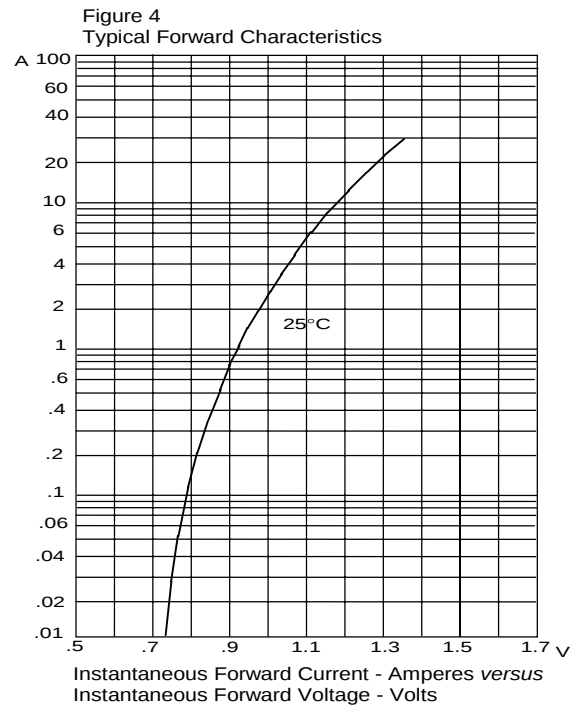
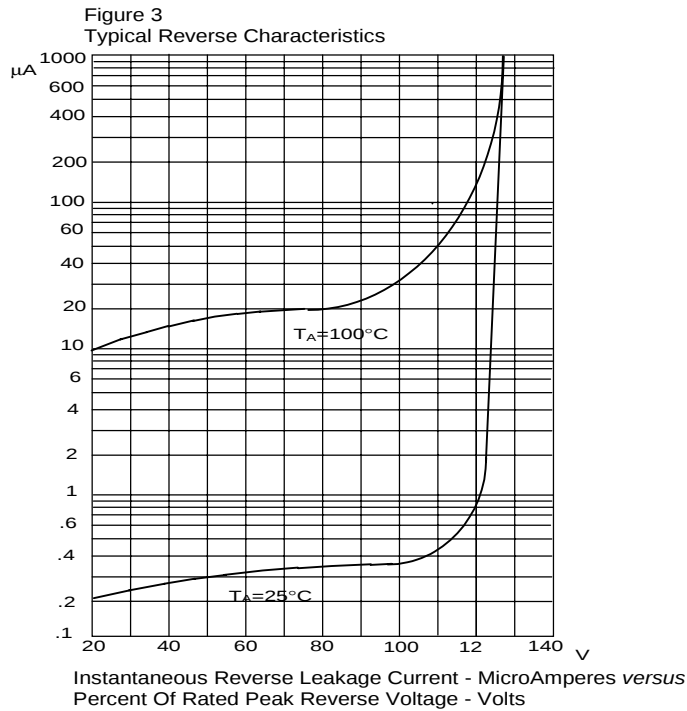
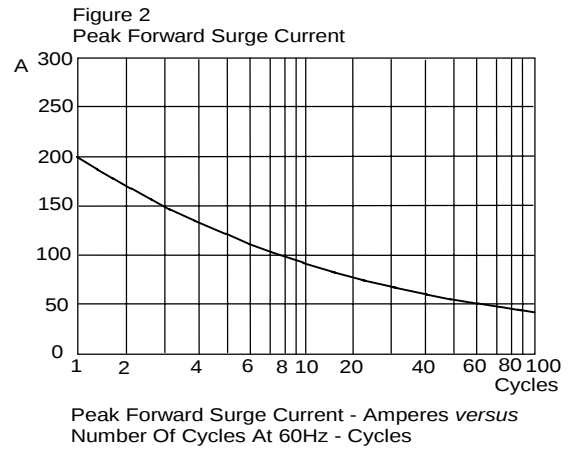
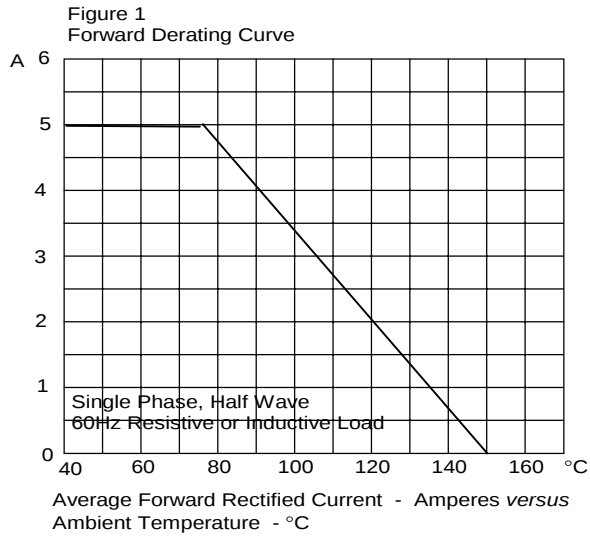
Parameter	Symbol	Max	Unit	Conditions
Maximum Instantaneous Forward Voltage (note 1)	V_F	1.20	V	$I_F=5.0\text{A}, T_J=25^{\circ}\text{C}$
Maximum DC Reverse Current	I_R	10	μA	$V_R=V_{RRM}, T_J=25^{\circ}\text{C}$
		250		$V_R=V_{RRM}, T_J=125^{\circ}\text{C}$

Notes:

1. Pulse test: Pulse width $200\mu\text{s}$, duty cycle 2%

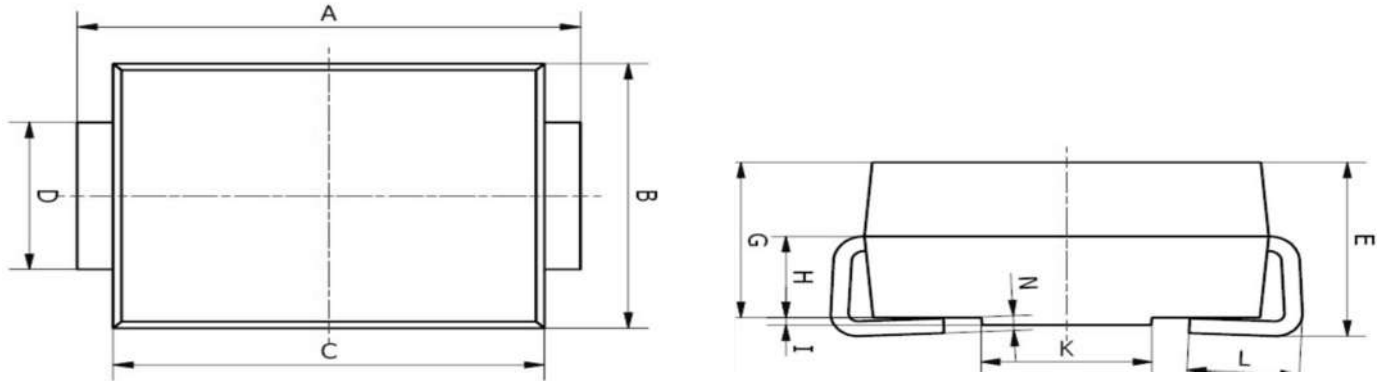
GENERAL PURPOSE RECTIFIER DIODE

TYPICAL CHARACTERISTICS



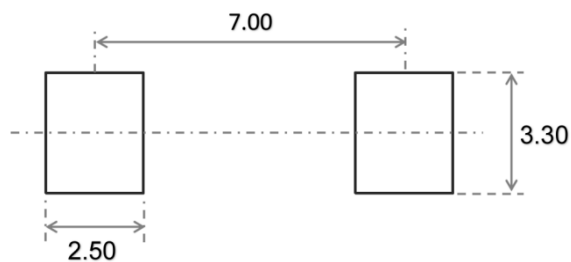
GENERAL PURPOSE RECTIFIER DIODE

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



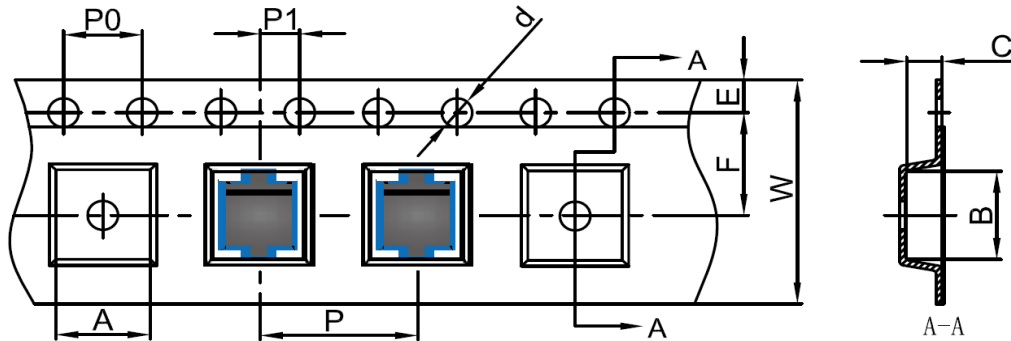
Note:

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

GENERAL PURPOSE RECTIFIER DIODE

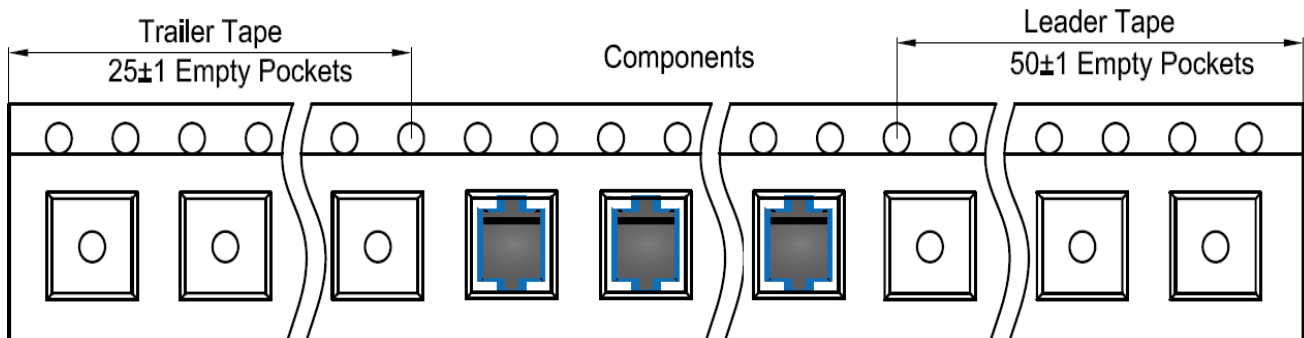
SMC Tape and Reel

SMC Embossed Carrier Tape

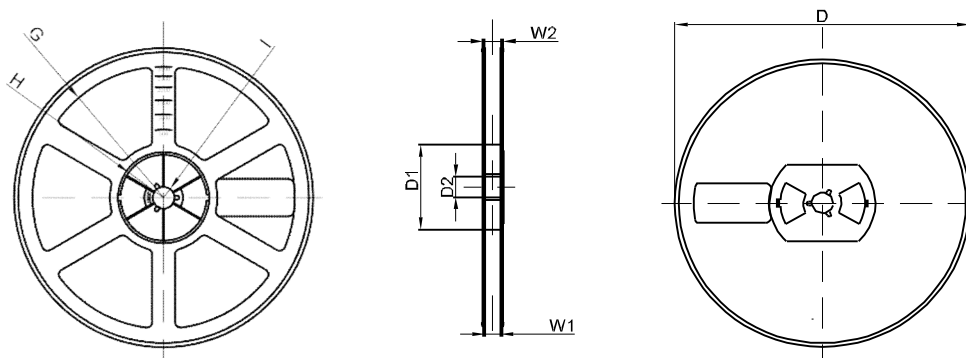


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SMC	6.3	8.25	2.90	Ø1.55	1.75	7.50	4.00	8.00	2.00	16.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

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