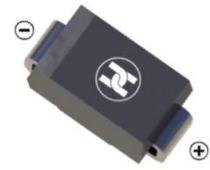


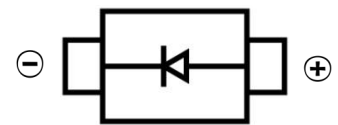
SCHOTTKY BARRIER DIODE

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications in order to optimize board space
- Low power loss,high efficiency
- High surge capacity
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard



SMB



MECHANICAL DATA

- Case: SMB(DO-214AA)
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.092 grams (approximate)
- Marking:MBRS140

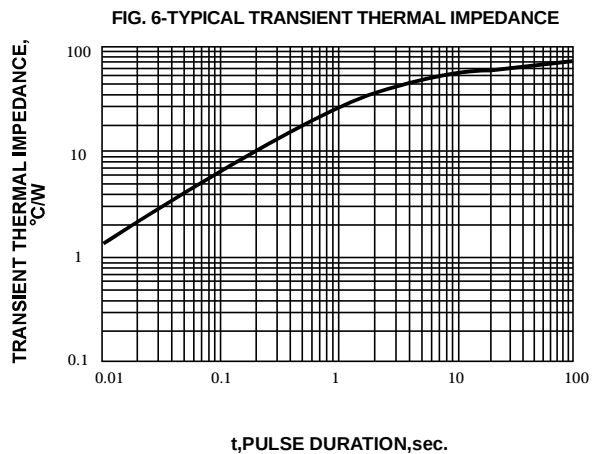
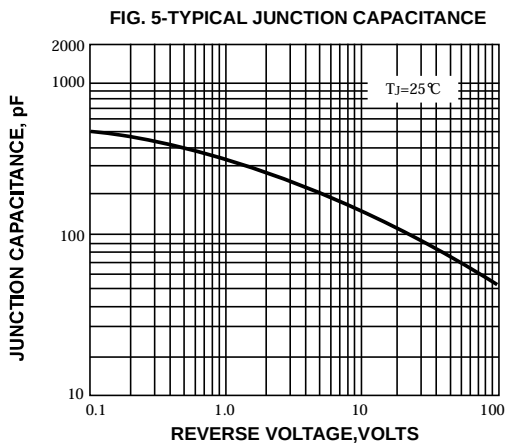
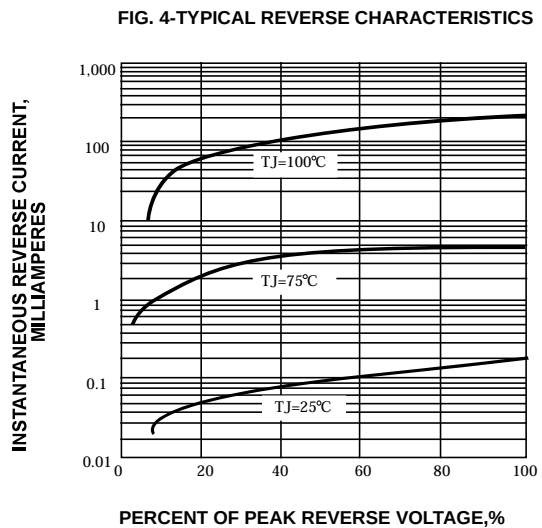
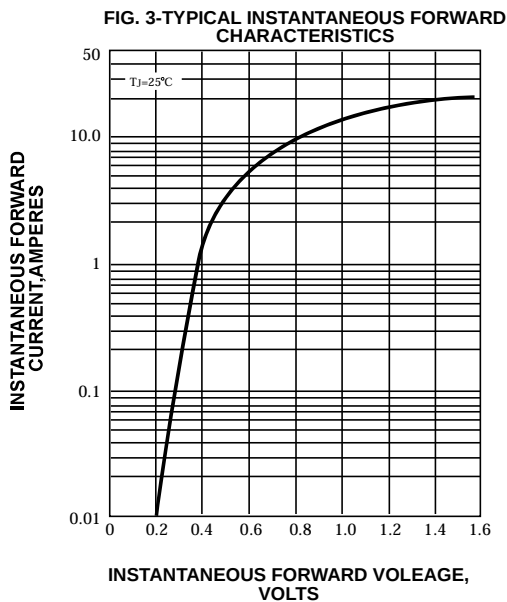
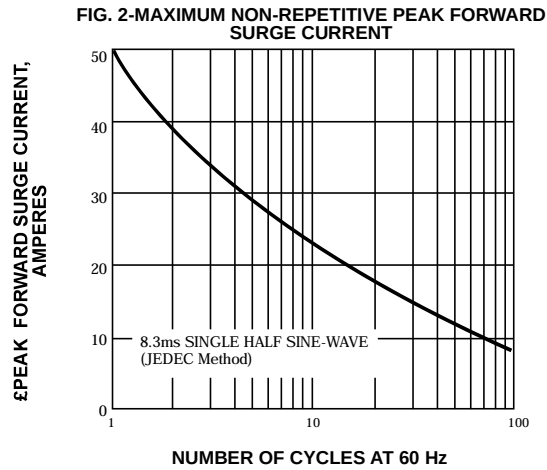
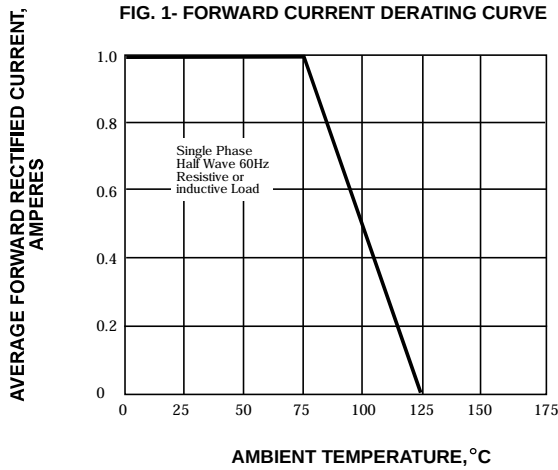
MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

	SYMBOLS MARKING	MBRS140	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	40	VOLTS
Maximum RMS voltage	V _{RMS}	28	VOLTS
Maximum DC blocking voltage	V _{DC}	40	VOLTS
Maximum average forward rectified current at T _L (see fig.1)	I _(AV)	1.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50.0	Amps
Maximum instantaneous forward voltage at 2.0A	V _F	0.55	Volts
Maximum DC reverse current at rated DC blocking voltage	I _R	0.5	mA
		20	
Typical junction capacitance (NOTE 1)	C _J	220	pF
Typical thermal resistance (NOTE 2)	R _{JA}	75.0	°C/W
Operating junction temperature range	T _J	-55 to +125	°C
Storage temperature range	T _{STG}	-55 to +150	°C

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

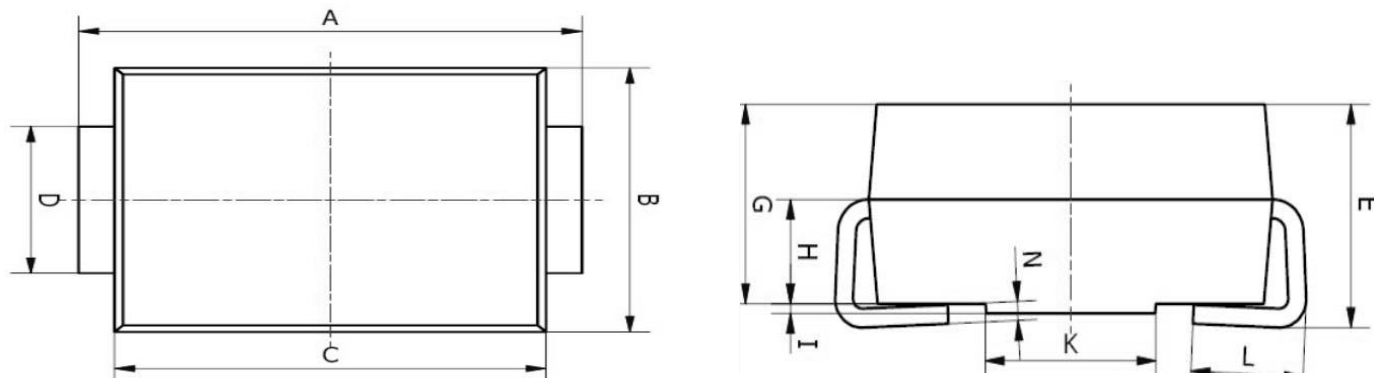
SCHOTTKY BARRIER DIODE

Typical Characteristics



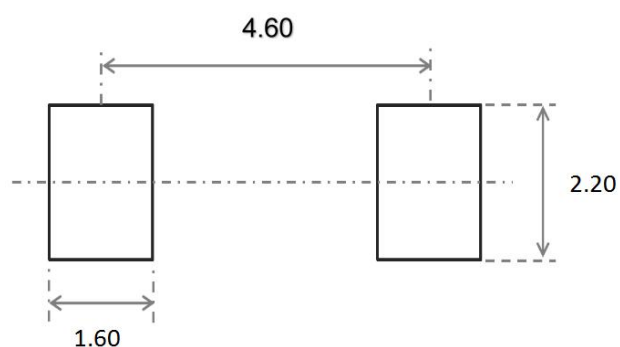
SCHOTTKY BARRIER DIODE

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



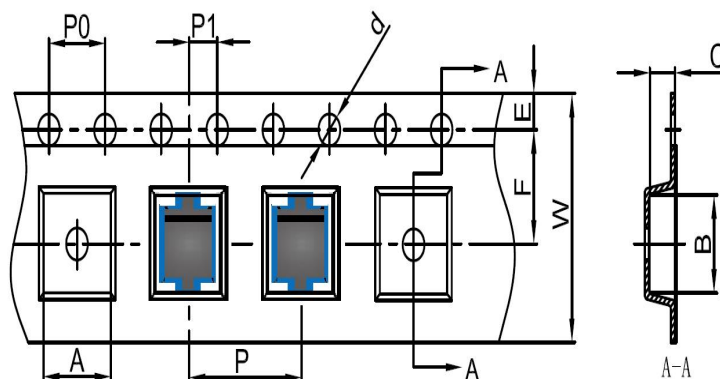
Note:

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

SCHOTTKY BARRIER DIODE

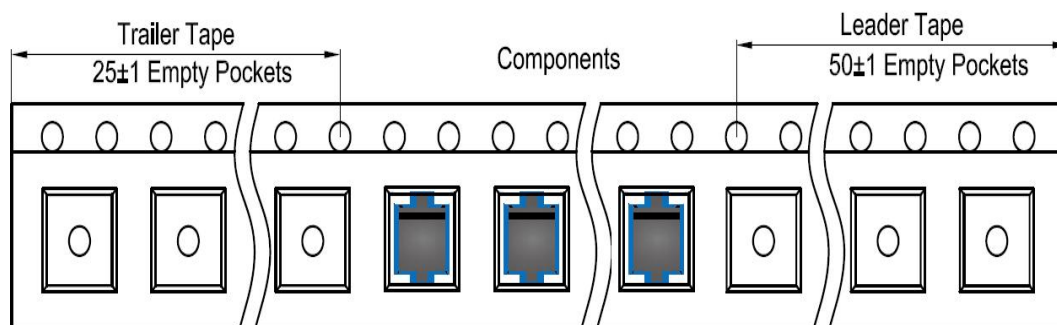
SMB Tape and Reel

SMB Embossed Carrier Tape

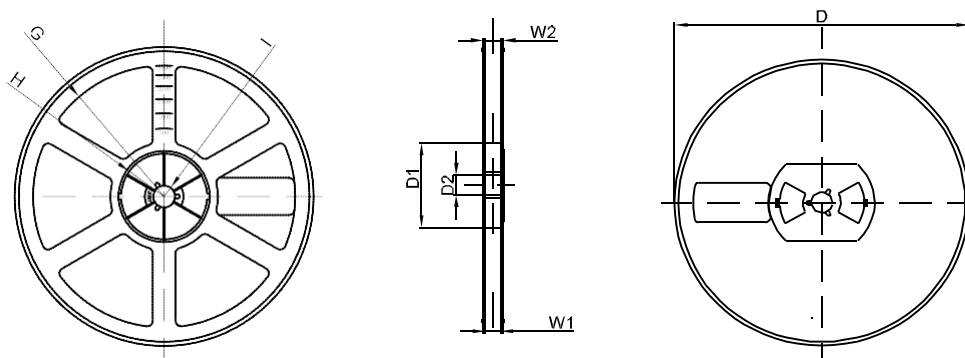


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SMB	4.10	5.50	2.58	Ø1.50	1.75	5.50	4.00	8.00	2.00	12.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

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