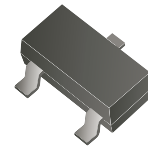


MMBD914-HF

Reverse Voltage: 75 Volts
 Forward Current: 200 mA
 RoHS Device
 Halogen Free



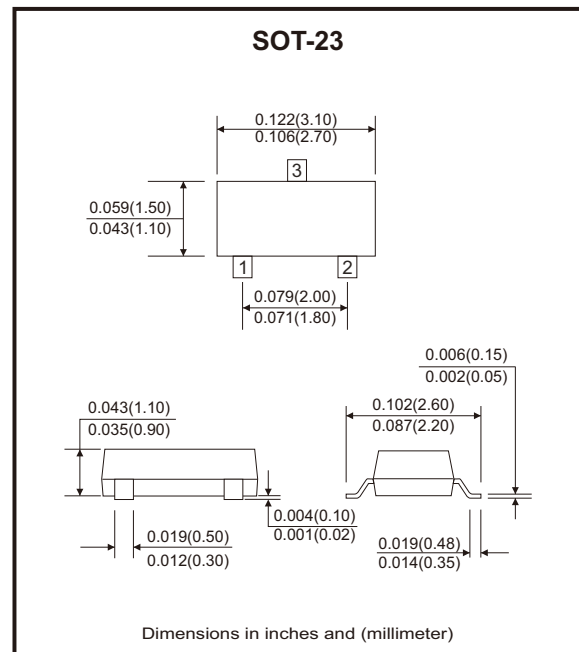
Features

- Fast switching speed.
- For general purpose switching applications.
- High conductance.
- Surface mount package ideally suited for automatic insertion.

Mechanical data

- Case: SOT-23, molded plastic.

Circuit diagram



Maximum Rating (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit	
Peak repetitive peak reverse voltage	V _{RRM}	75	V	
Working peak reverse voltage	V _{RWM}			
DC reverse voltage	V _R			
Non-repetitive peak reverse voltage	V _{RM}	100	V	
RMS reverse voltage	V _{R(RMS)}	53	V	
Forward continuous current	I _{FM}	300	mA	
Non-repetitive peak forward surge current	I _{FSM}	@t= 1μs	2.0	A
		@t= 1s	1.0	
Average rectified output current	I _o	200	mA	
Power dissipation	P _D	350	mW	
Thermal resistance junction to ambient air	R _{θJA}	357	°C/W	
Operating and storage temperature range	T _J , T _{STG}	-65 to +150	°C	

Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=100\mu A$	75		V
Forward voltage	V_{F1} V_{F2} V_{F3} V_{F4}	$I_F=1mA$ $I_F=10mA$ $I_F=50mA$ $I_F=150mA$		715 855 1000 1250	mV
Reverse current	I_R	$V_R=75V$ $V_R=75V, T_J=150^\circ C$ $V_R=25V, T_J=150^\circ C$ $V_R=20V$		1.0 50 30 25	μA μA μA nA
Reverse recovery time	t_{rr}	$I_F=I_R=10mA, I_{rr}=0.1*I_R, R_L=100\Omega$		4	nS
Diode capacitance	C_D	$V_R=0V, f=1MHz$		2	pF

Rating and Characteristic Curves (MMBD914-HF)

Fig.1 - Power Derating Curve

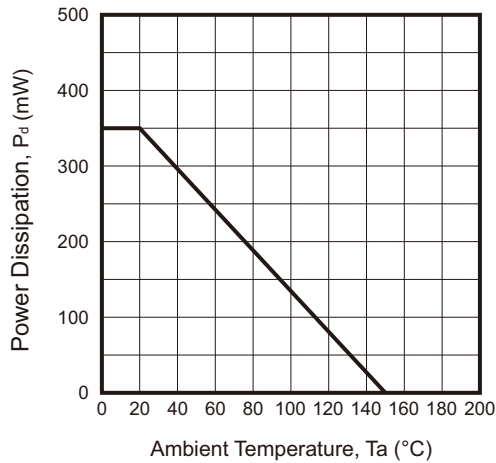


Fig.2 - Forward Characteristics

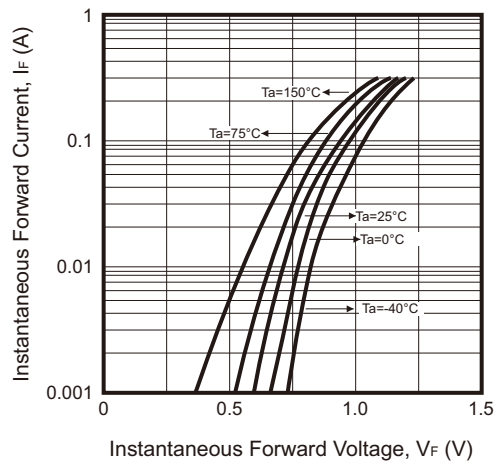


Fig.3 - Typical Reverse Characteristics

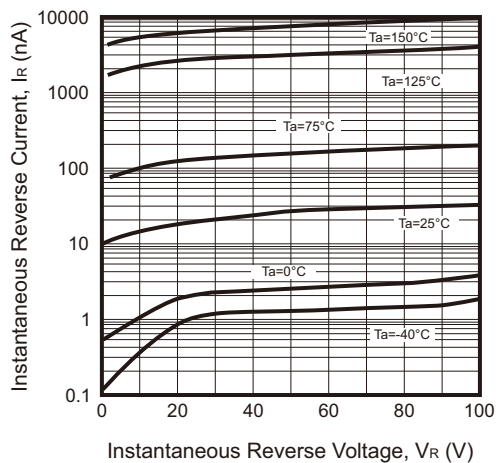
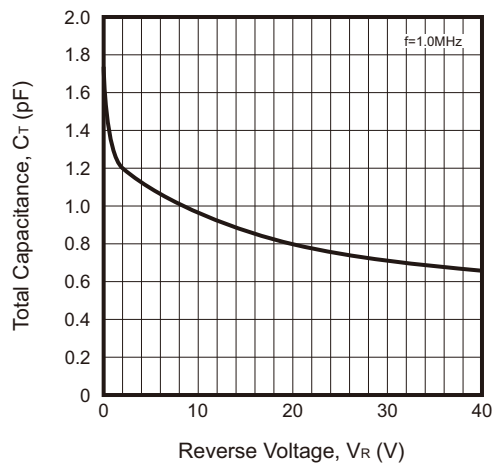


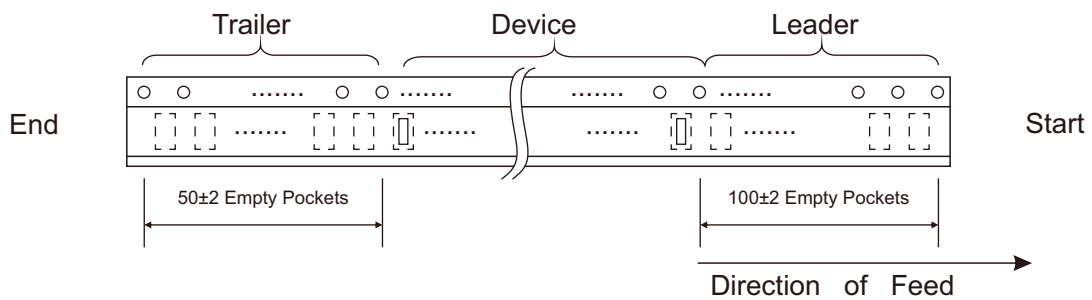
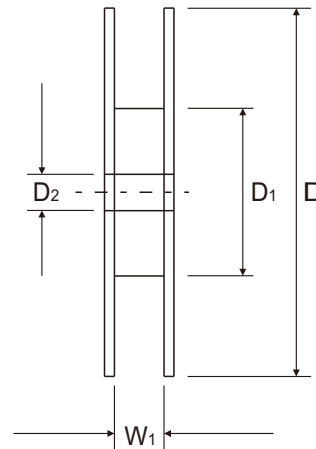
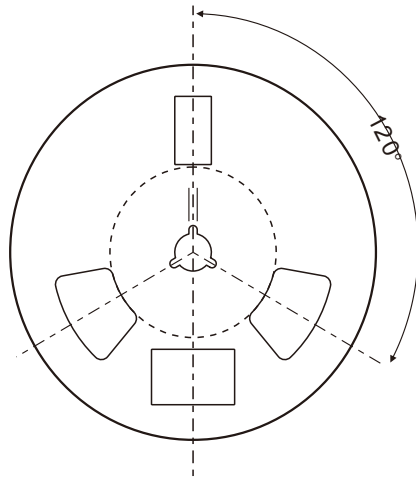
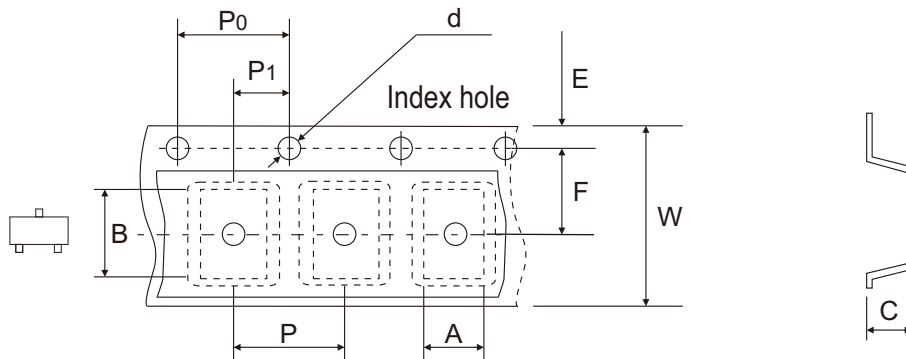
Fig.4 - Typical Capacitance vs. Reverse Voltage



Company reserves the right to improve product design, functions and reliability without notice.

REV:A

Reel Taping Specification



SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 ± 0.10	178.00 ± 1.00	54.00 ± 0.50	13.00 ± 0.50
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 ± 0.004	7.008 ± 0.039	2.126 ± 0.020	0.512 ± 0.020

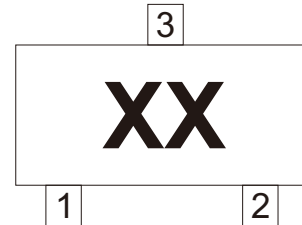
SOT-23	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	8.00 + 0.30 - 0.10	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.315 + 0.012 - 0.004	0.374 ± 0.039

Company reserves the right to improve product design, functions and reliability without notice.

REV:A

Marking Code

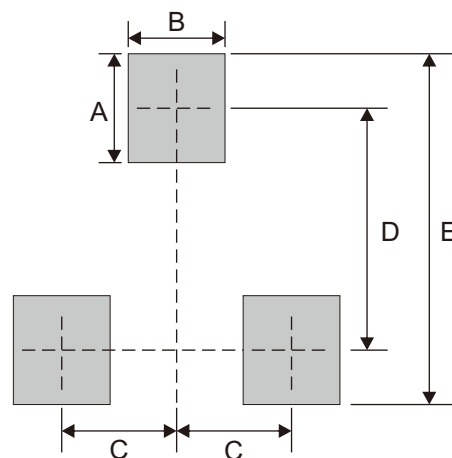
Part Number	Marking Code
MMBD914-HF	5D



xx = Product type marking code

Suggested PAD Layout

SIZE	SOT-23	
	(mm)	(inch)
A	0.90	0.035
B	0.80	0.031
C	0.95	0.037
D	2.00	0.079
E	2.90	0.114



Note: 1. The pad layout is for reference purposes only.

Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-23	3,000	7