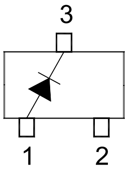
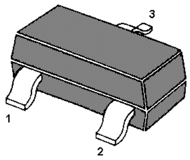
MMBD914 Silicon Epitaxial Planar Switching Diode



Features

- Small package
- Low forward voltage
- Fast reverse recovery time
- Small total capacitance



Applications

- Ultra high speed switching application

Marking Code: **5D**

SOT-23 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	100	V
Forward Current	I_F	200	mA
Non-repetitive Peak Forward Surge Current (t = 1 µs)	I_{FSM}	4	A
Power Dissipation	P_{tot}	350	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at I_F = 10 mA	V_F	-	1	V
Reverse Breakdown Voltage at I_R = 100 µA	$V_{(BR)R}$	100	-	V
Reverse Current at V_R = 20 V at V_R = 75 V	I_R	- -	25 5	nA µA
Reverse Recovery Time at I_F = I_R = 10 mA	t_{rr}	-	4	ns
Total Capacitance at V_R = 0 , f = 1 MHz	C_T	-	4	pF

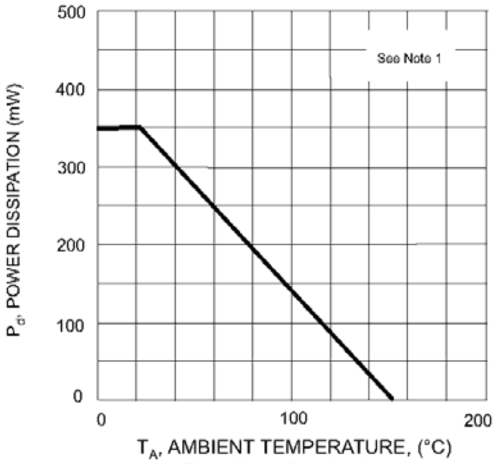


Fig. 1 Power Derating Curve

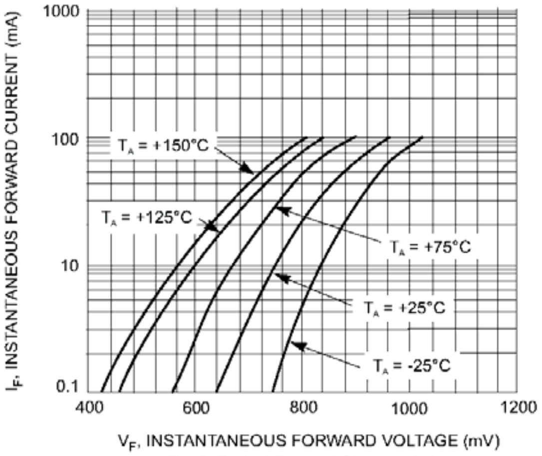


Fig. 2, Typical Forward Characteristics

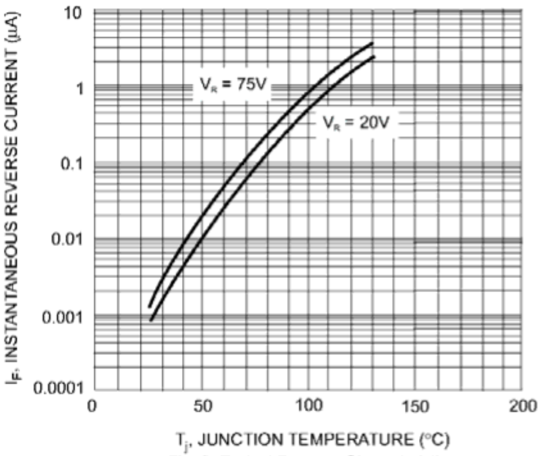
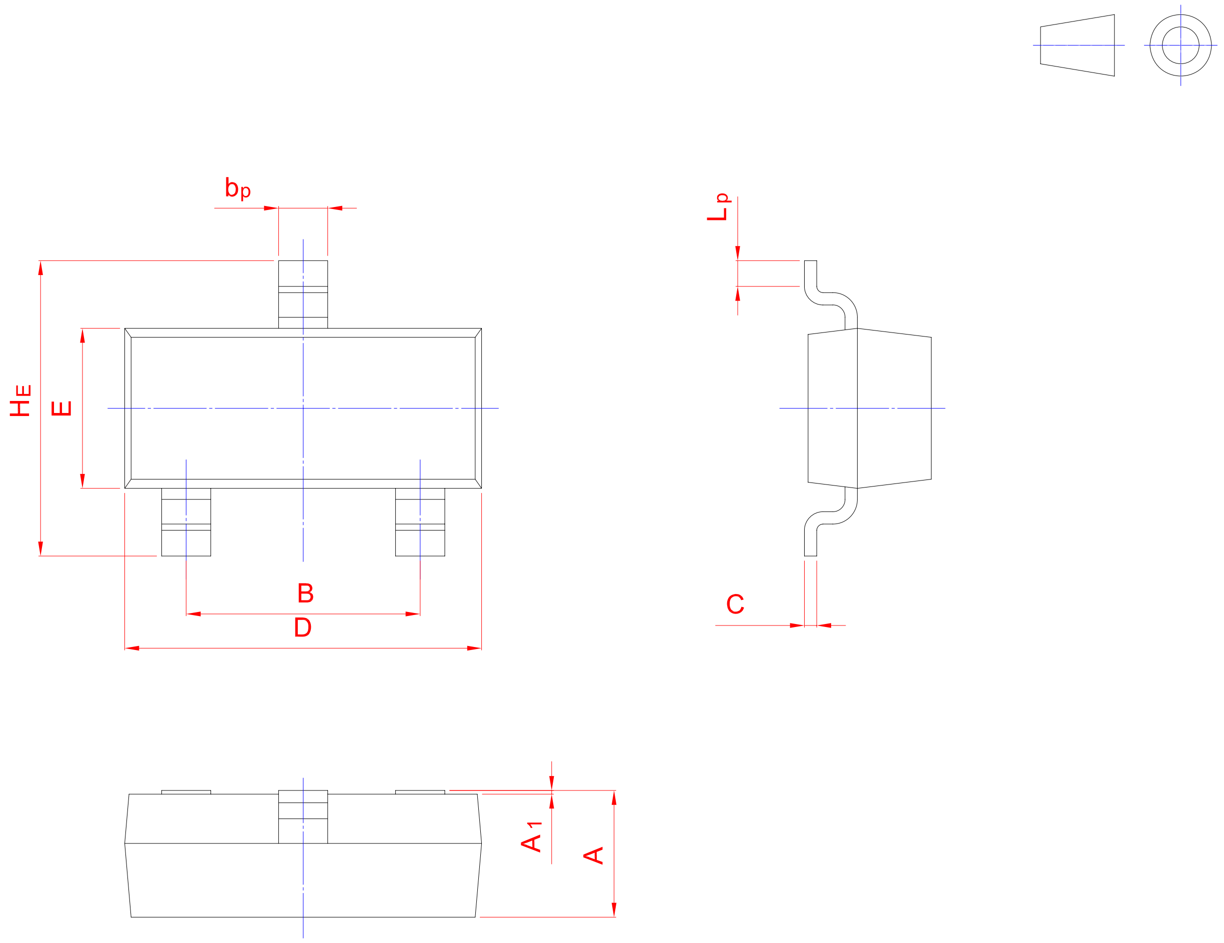


Fig. 3, Typical Reverse Characteristics

PACKAGE OUTLINE

Plastic surface mounted package; 3 leads **SOT-23**



UNIT	A	B	b_p	C	D	E	H_E	A_1	L_p
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20