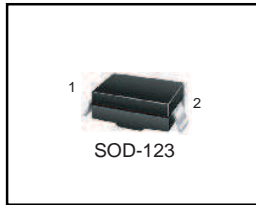


BAT42WG/BAT43WG

SCHOTTKY DIODES

FEATURES

- Low Forward Voltage Drop
- Fast Switching Time
- Surface Mount Package Ideally Suited for Automatic Insertion



Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^\circ\text{C}$

Parameter	Symbol	BAT42WG/BAT43WG	Unit
Peak Repetitive Peak reverse voltage	V_{RRM}	30	V
Working Peak	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Forward Continuous Current	I_{FM}	200	mA
Repetitive Peak Forward Current @ $t<1.0s$	I_{FRM}	500	mA
Peak forward surge current @ $<10ms$	I_{FSM}	4.0	A
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
Storage temperature	T_{STG}	-55~+125	$^\circ\text{C}$

Electrical Ratings @ $T_A=25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	30			V	$I_R=10\mu\text{A}$
Forward voltage	All Types			1.0	V	$I_F=200\text{mA}$
	BAT42WG			0.4	V	$I_F=10\text{mA}$
	BAT42WG			0.65	V	$I_F=50\text{mA}$
	BAT43WG	0.26		0.33	V	$I_F=2\text{mA}$
	BAT43WG			0.45	V	$I_F=15\text{mA}$
Reverse current	I_R			0.5	μA	$V_R=25\text{V}$
Capacitance between terminals	C_T			10	pF	$V_R=1.0\text{V}, f=1.0\text{MHz}$
Reverse Recovery Time	t_{rr}			5	ns	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

TYPICAL CHARACTERISTICS

FIG. 1 - FORWARD CHARACTERISTICS

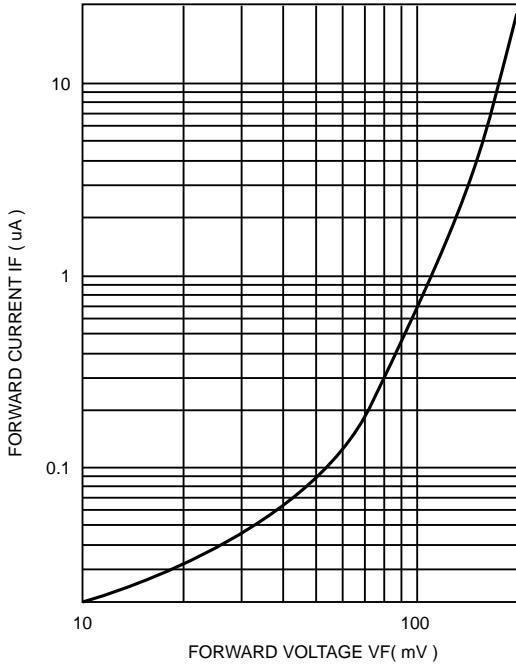
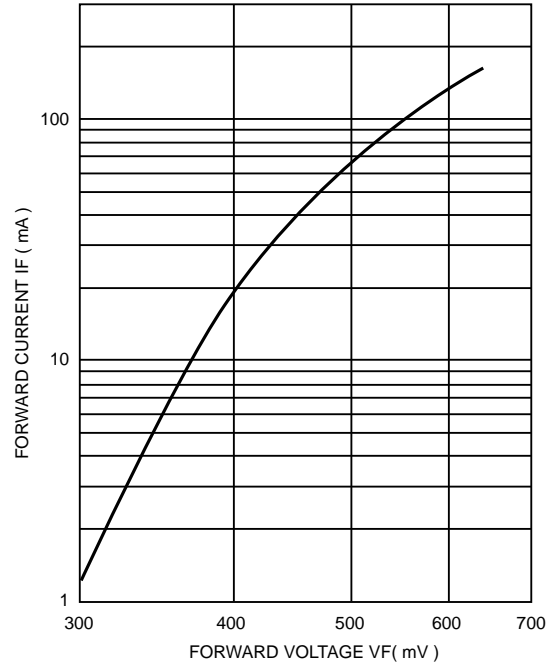
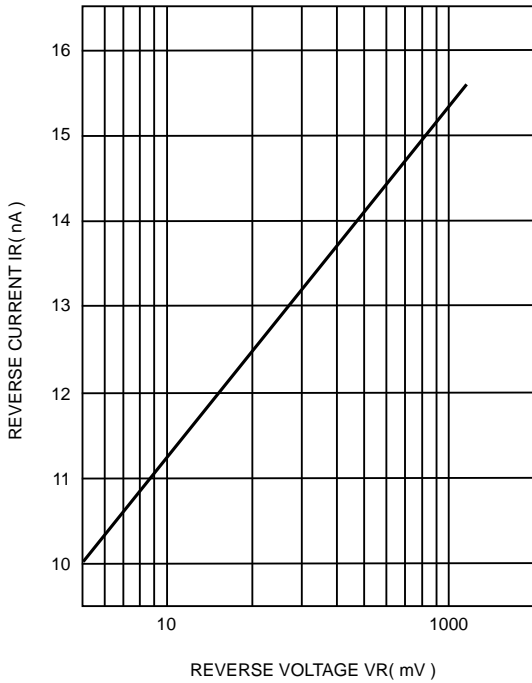


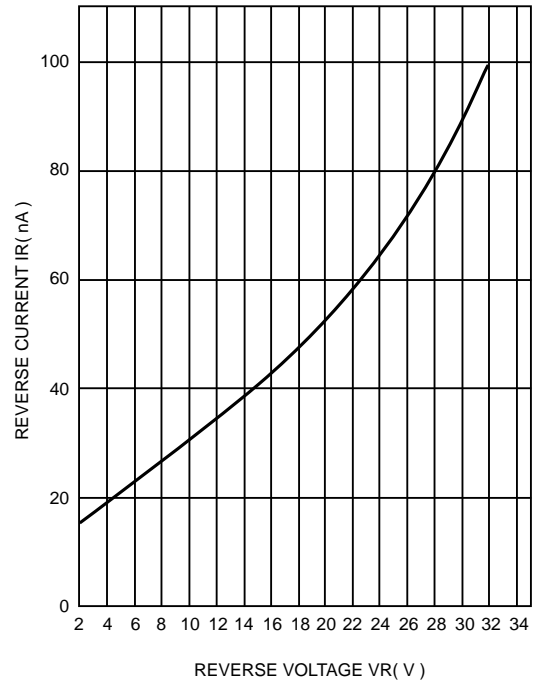
FIG. 2 - FORWARD CHARACTERISTICS



REVERSE CHARACTERISTICS



REVERSE CHARACTERISTICS



TYPICAL CHARACTERISTICS

FIG. 1 - FORWARD CHARACTERISTICS

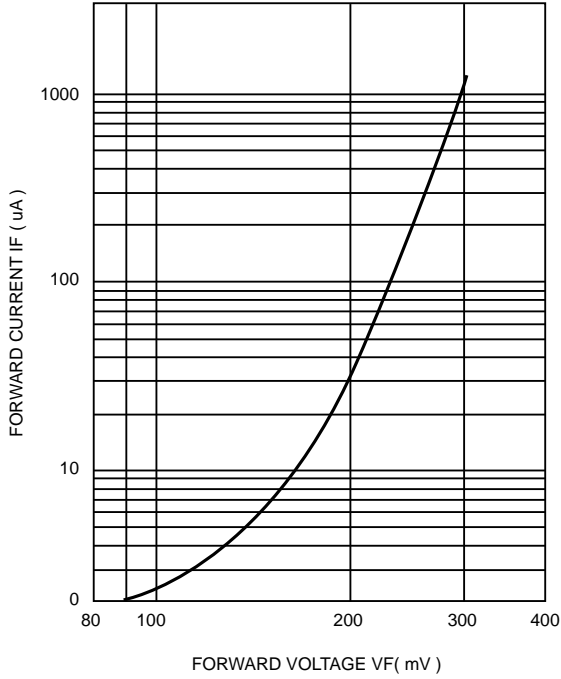
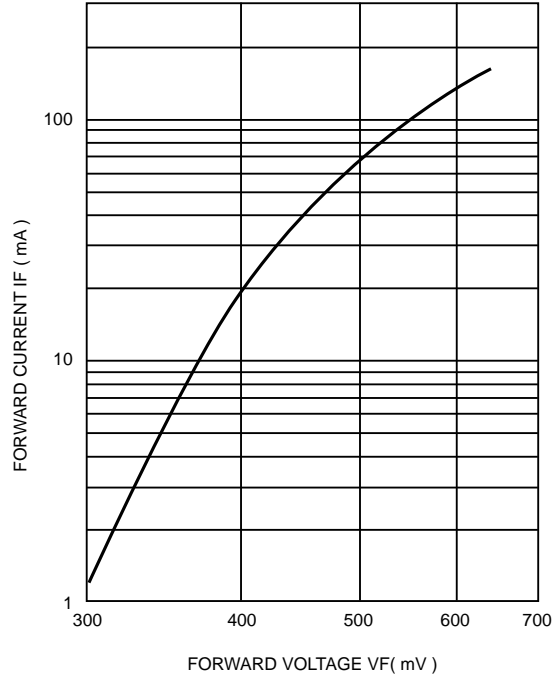
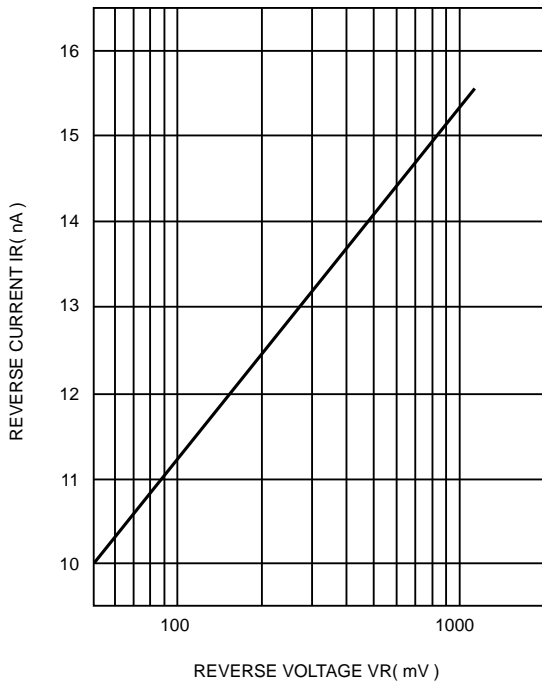


FIG. 2 - FORWARD CHARACTERISTICS



REVERSE CHARACTERISTICS



REVERSE CHARACTERISTICS

