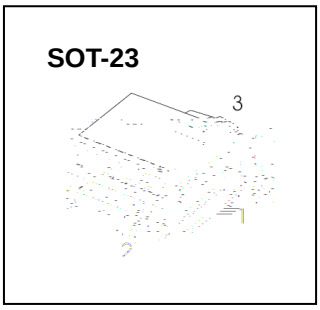
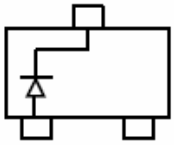
BAT54/BAT54A/BAT54CBAT54S

SCHOTTKY DIODES

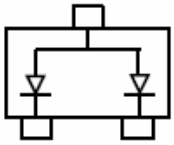


FEATURES

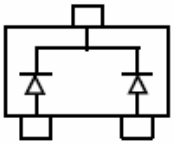
- Extremely Fast Switching Speed



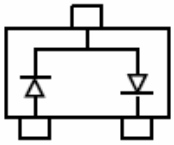
BAT54 MARKING: KL1



BAT54A MARKING: KL2



BAT54C MARKING: KL3



BAT54S MARKING: KL4

Maximum Ratings @T_A=25

Parameter	Symbol	Limits	Unit
Peak Repetitive Peak reverse voltage **Working Peak Reverse Voltage** **DC Blocking Voltage**	V_{RRM} V_{RWM} V_R	30	V
Forward Continuous Current	I_{FM}	200	mA
Power Dissipation	P_D	200	mW
Storage temperature	T_{STG}	-55-150	

Electrical Characteristics @T_A=25

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	30			V	IR=100 A
Forward voltage	V_{F1}			0.24	V	I_F=0.1mA
	V_{F2}			0.32	V	I_F=1mA
	V_{F3}			0.40	V	I_F=10mA
	V_{F4}			0.50	V	I_F=30mA
	V_{F5}			1	V	I_F=100mA
Reverse current	I_R			2	A	V_R=25V
Diode Capacitance	C_D			10	pF	V_R=1V,f=1MHz
Reverse Recovery Time	t_{rr}			5	nS	I_F=I_R=10mA Irr=0.1XI_R,R_L=100

Typical Characteristics

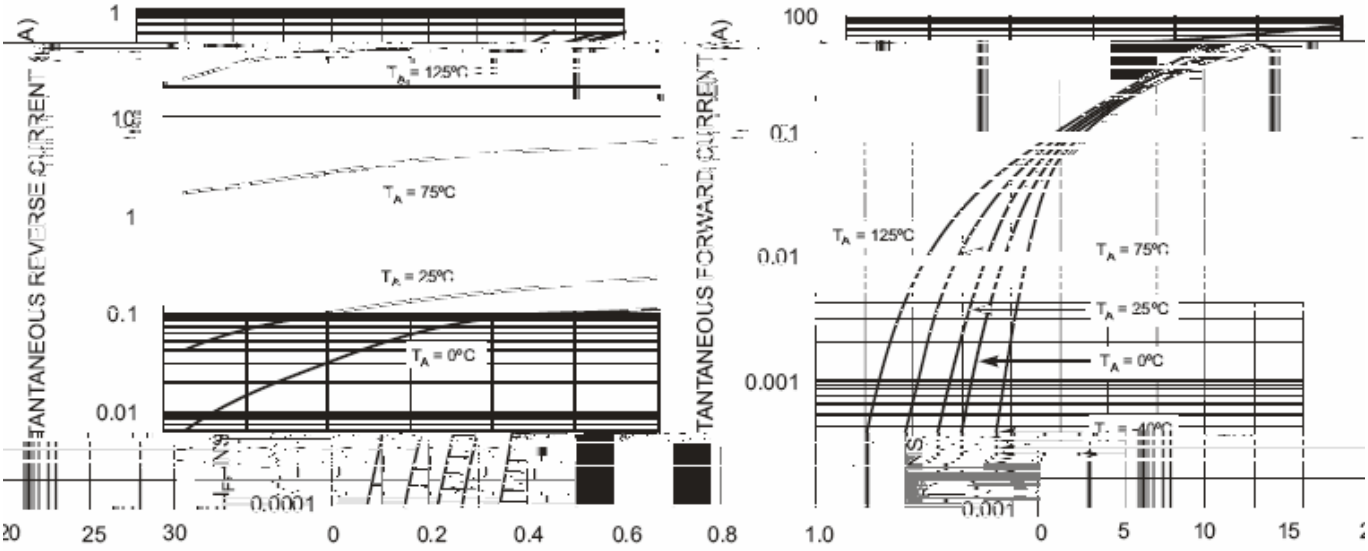
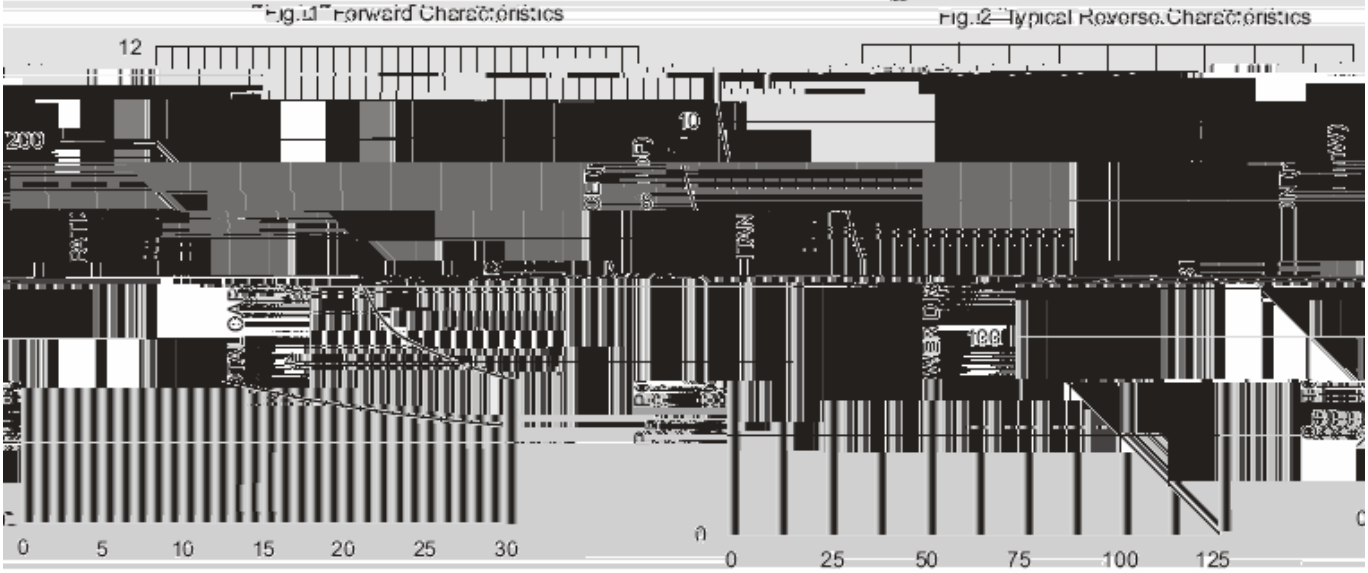


Fig.1 Forward Characteristics

Fig.2 Typical Reverse Characteristics



V_R, REVERSE VOLTAGE (V)
Fig. 3 Typical Capacitance vs. Reverse Voltage

T_A, AMBIENT TEMPERATURE (°C)
Fig. 4 Power Derating Curve