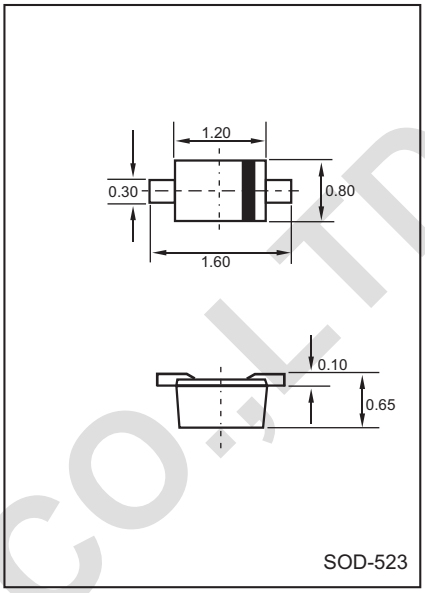
BAT54X Schottky barrier Diodes



FEATURES

- Extremely Fast Switching Speed
- Low forward voltage – 0.35 V (Typ) @ I_F= 10 mAdc

MARKING: JV

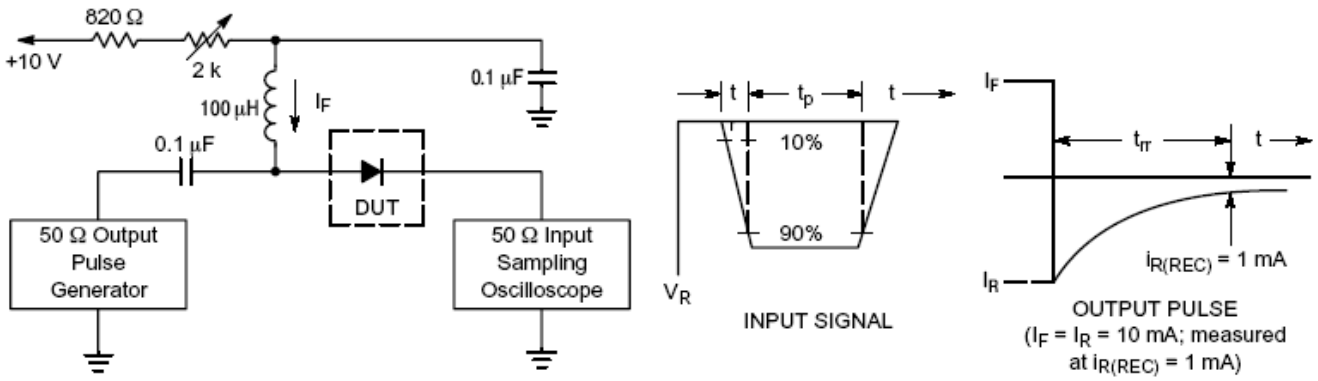
Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25℃

Parameter	Symbol	Limits	Unit
DC reverse voltage	V_R	30	V
Forward current	I_F	200	mA
Repetitive peak forward current	I_{FRM}	300	mA
Non-repetitive peak forward current (t=1us)	I_{FSM}	600	mA
Total Device Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	635	℃/W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	150	℃

Electrical Ratings @T_A=25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)R}$	30				I_R=10uA
Forward voltage	V_{F1}		0.22	0.24	V	I_F=0.1mA
	V_{F2}		0.41	0.5		I_F=30mA
	V_{F3}		0.52	0.8		I_F=100mA
	V_{F4}		0.29	0.32		I_F=1.0mA
	V_{F5}		0.35	0.40		I_F=10mA
Reverse Recovery Time	t_{rr}			5	ns	I_F=I_R=10mAdc,$I_{R(REC)}$=1mAdc
Reverse current	I_R		0.5	2.0	μ A	V_R=25V
Total Capacitance	C_T		7.6	10	pF	V_R=1V,f=1MHZ

WEJ ELECTRONIC CO.,LTD



Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10 mA.
2. Input pulse is adjusted so $I_{R(peak)}$ is equal to 10 mA.
3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

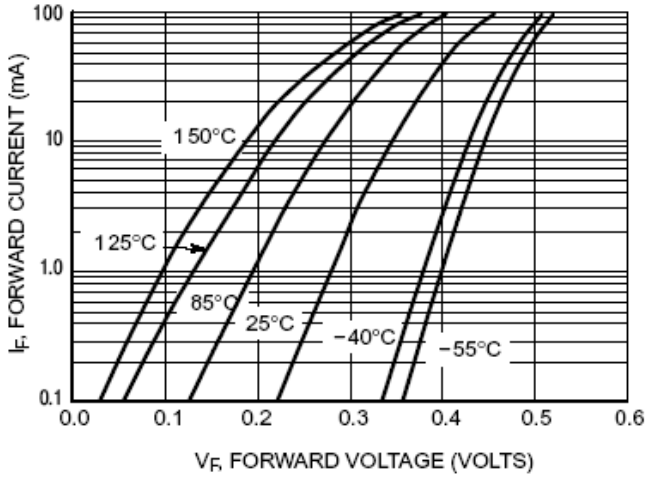


Figure 2. Forward Voltage

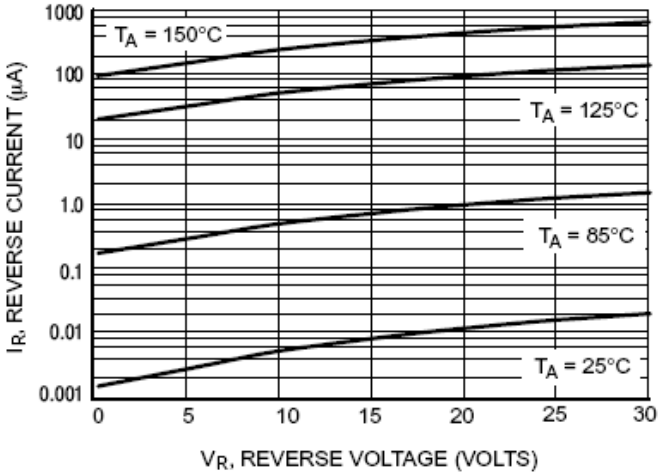


Figure 3. Leakage Current

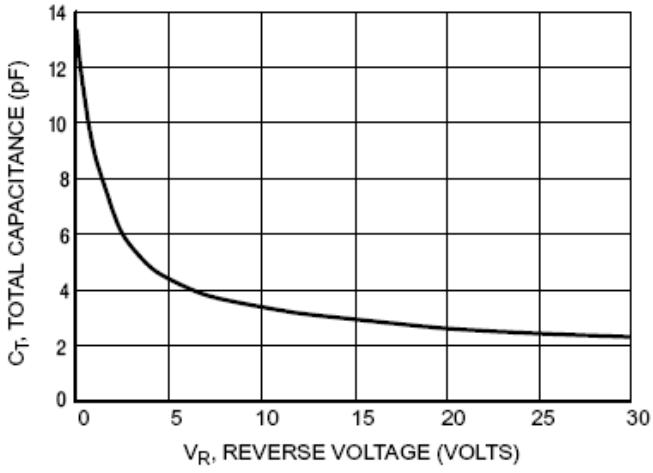


Figure 4. Total Capacitance