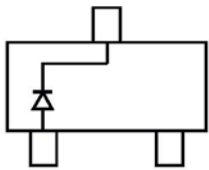


SWITCHING Diodes

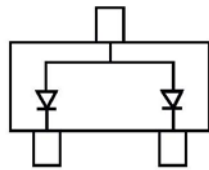
FEATURES

- Extremely fast switching speed
- Low forward voltage:0.4(max)@IF=10mA

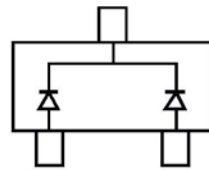
SOT-323



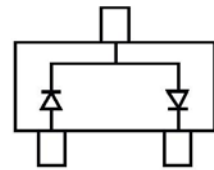
BAT54W Marking: KL5



BAT54AW Marking: KL6



BAT54CW Marking: KL7



BAT54SW Marking: KL8

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

Parameter	Symbol	Limits	Unit
Reverse voltage	V _R	30	V
Forward current	I _F	200	mA
Forward power dissipation	P _D	200	mW
Junction temperature	T _j	125	°C
Storage temperature	T _{stg}	-55~125	°C

Electrical Ratings @T_A=25°C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	V _(BR)	I _R =100uA	30			V
Reverse current	I _R	V _R =25V			2	uA
Forward voltage	V _{F1}	I _F =0.1mA			0.24	V
	V _{F2}	I _F =1mA			0.32	V
	V _{F3}	I _F =10mA			0.4	V
	V _{F4}	I _F =30mA			0.5	V
	V _{F5}	I _F =100mA			1	V
Capacitance between terminals	C _T	V _R =0V, f=1MHZ			10	pF
Reverse recovery time	t _{rr}	I _F =I _R =10mA, I _{tr} =0.1*I _R , R _L =100Ω			5	ns

Typical Characteristics

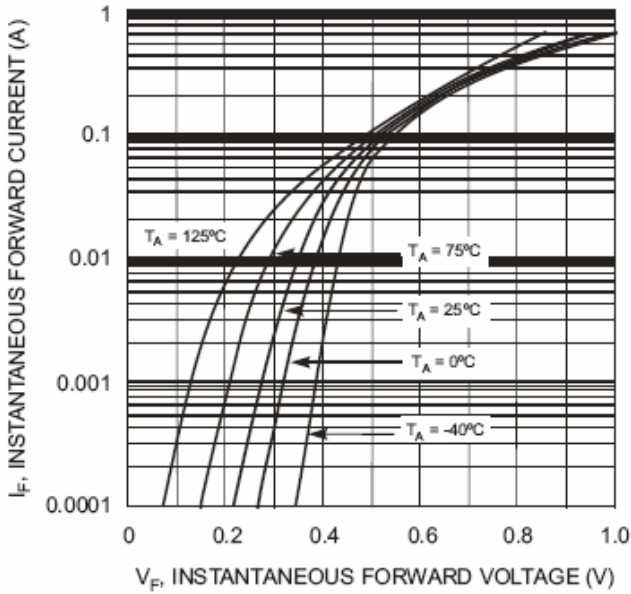


Fig. 1 Forward Characteristics

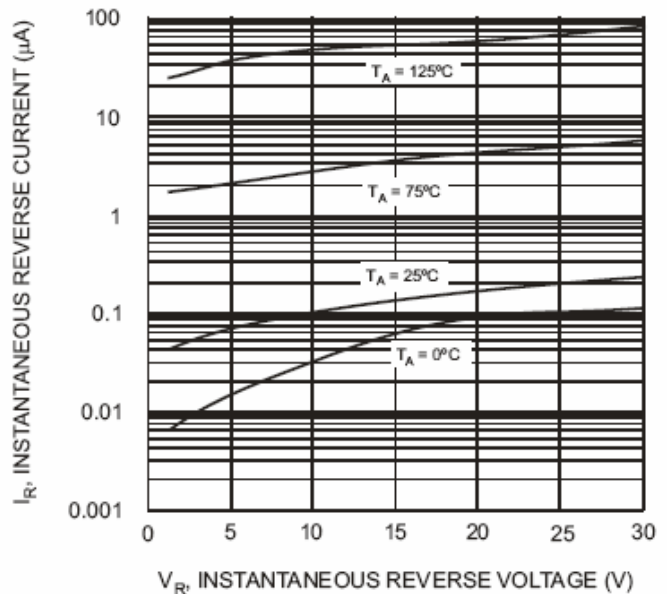


Fig. 2 Typical Reverse Characteristics

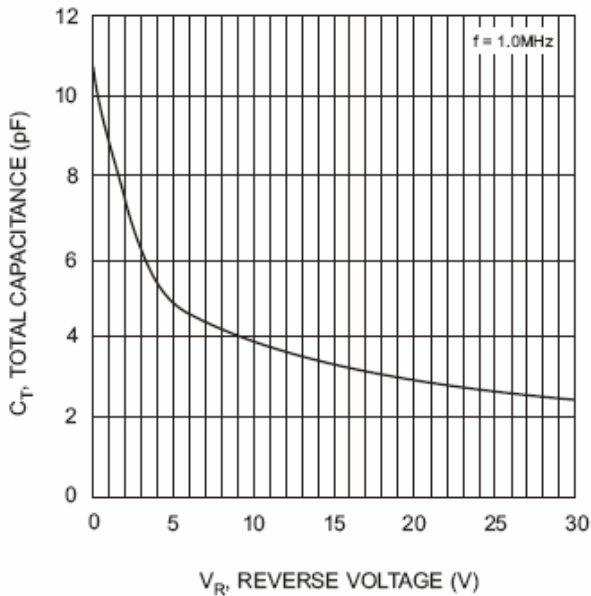


Fig. 3 Typical Capacitance vs. Reverse Voltage

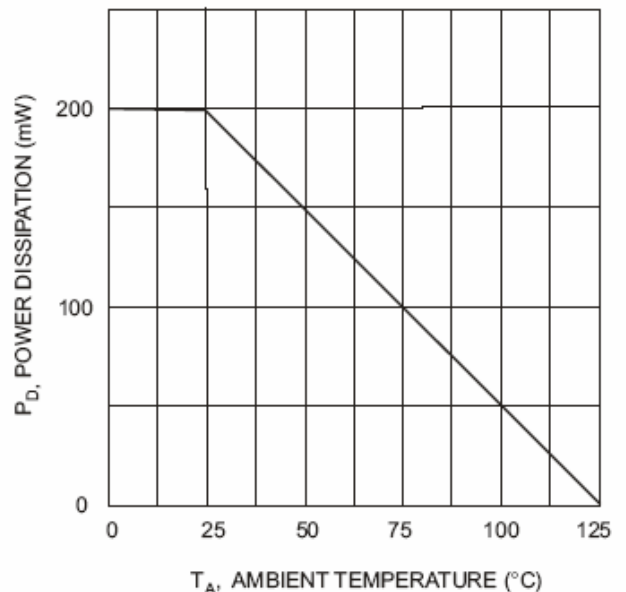


Fig. 4 Power Derating Curve