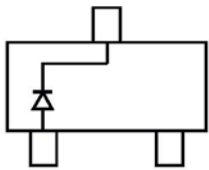


## SWITCHING Diodes

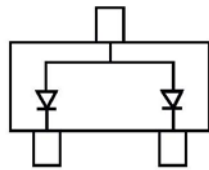
### FEATURES

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

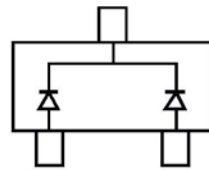
SOT-323



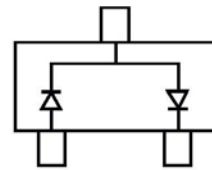
BAT54W Marking: KL5



BAT54AW Marking: KL6



BAT54CW Marking: KL7



BAT54SW Marking: KL8

### Maximum Ratings and Electrical Characteristics, Single Diode @T<sub>A</sub>=25°C

Parameter	Symbol	Limits	Unit
Reverse voltage	V <sub>R</sub>	30	V
Forward current	I <sub>F</sub>	200	mA
Forward power dissipation	P <sub>D</sub>	200	mW
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-55~125	°C

### Electrical Ratings @T<sub>A</sub>=25°C

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

## Typical Characteristics

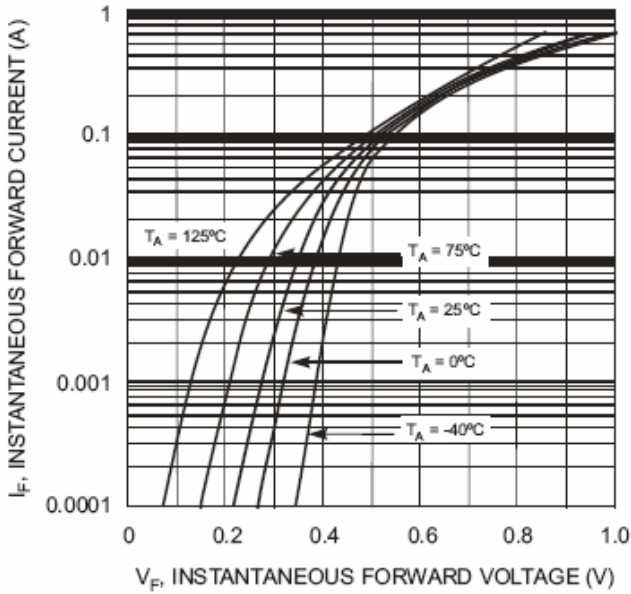


Fig. 1 Forward Characteristics

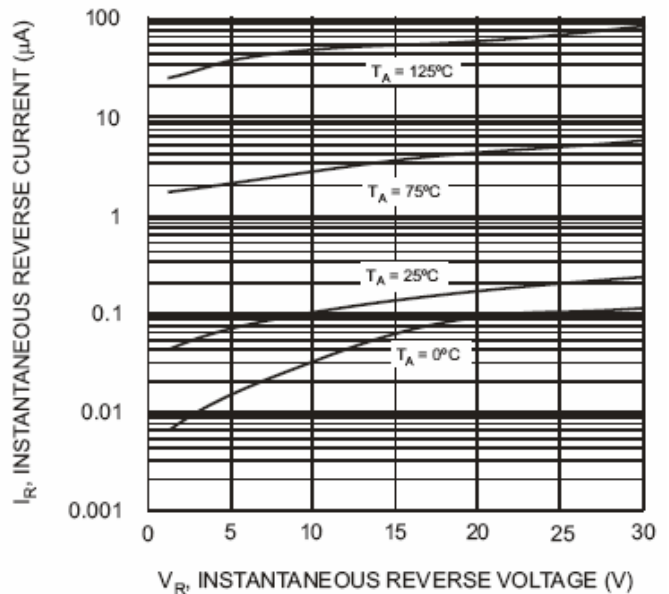


Fig. 2 Typical Reverse Characteristics

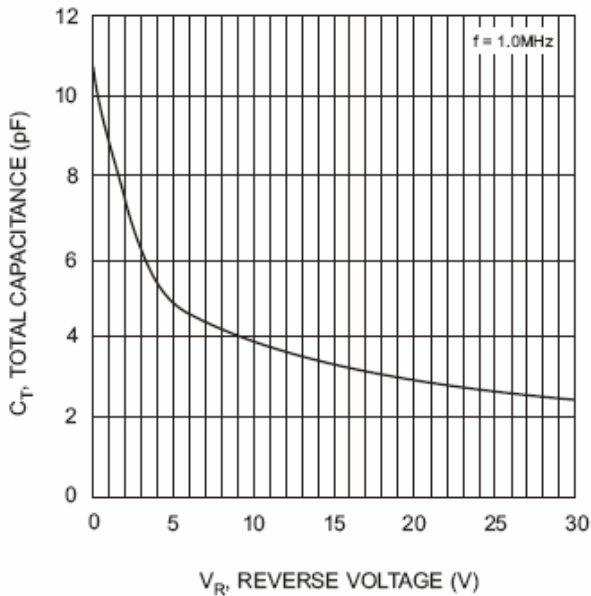


Fig. 3 Typical Capacitance vs. Reverse Voltage

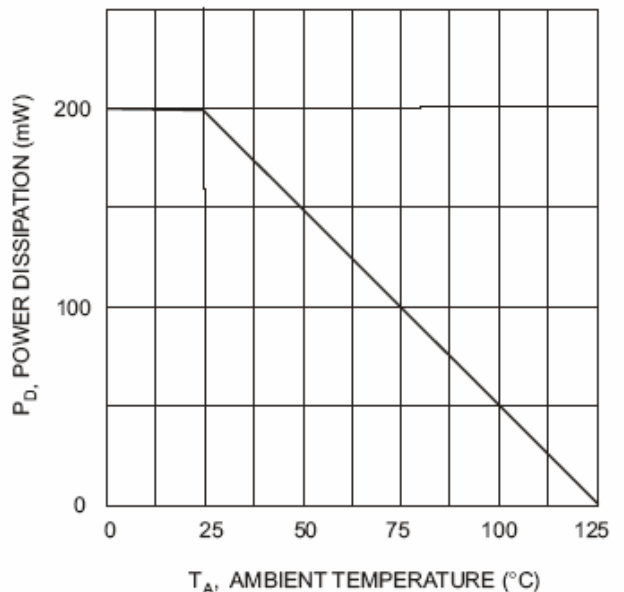


Fig. 4 Power Derating Curve