

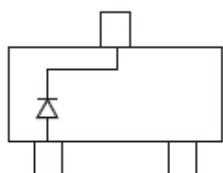


SOT-523 Plastic-Encapsulate Diodes

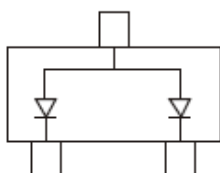
BAT54T/AT/CT/ST SWITCHING DIODE

FEATURES

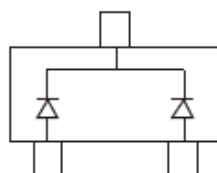
- Ultra-Small Surface Mount Package
- Low Forward Voltage Drop
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Available in Lead Free Version

SOT-523

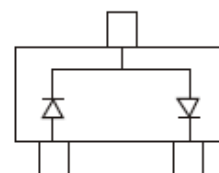
BAT54T Marking: L1



BAT54AT Marking: L2



BAT54CT Marking: L3



BAT54ST Marking: L4

Maximum Ratings @T_A=25°C

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V _{RM}	30	V
DC Blocking Voltage	V _R		
Average Rectified Output Current	I _O	200	mA
Power Dissipation	P _d	150	mW
Junction temperature	T _J	150	°C
Storage temperature range	T _{STG}	-65-150	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	V _(BR)	I _R = 100 μ A	30		V
Reverse voltage leakage current	I _R	V _R =25V		2	uA
Forward voltage	V _F	I _F =0.1mA I _F =1mA I _F =10mA I _F =30mA I _F =100mA		240 320 400 500 1000	mV
Total capacitance	C _T	V _R =1V,f=1MHz		10	pF
Reverse recovery time	t _{rr}	I _F =10mA, I _R =10mA~1mA R _L =100 Ω		5	nS

Typical Characteristics

BAT54T/AT/CT/ST

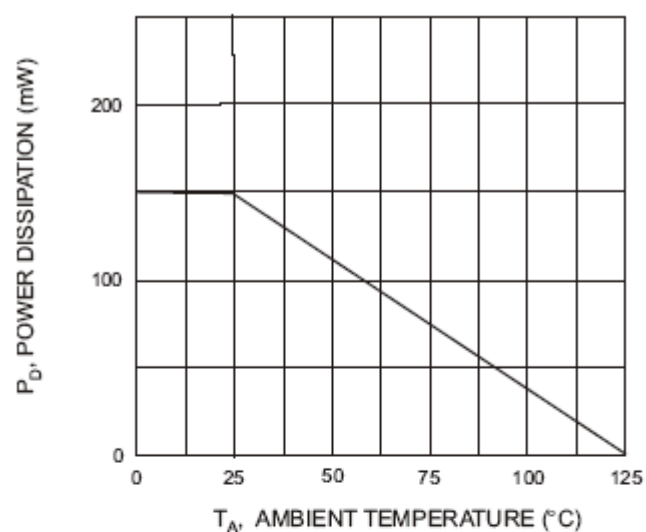


Fig. 1 Power Derating Curve

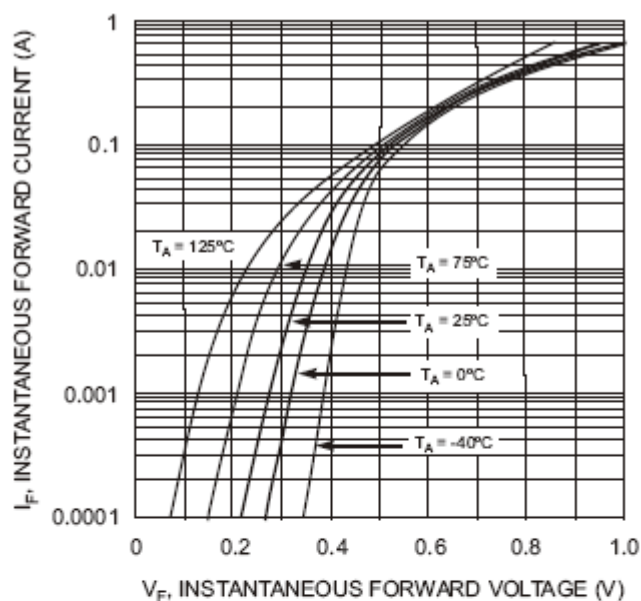


Fig. 2 Forward Characteristics

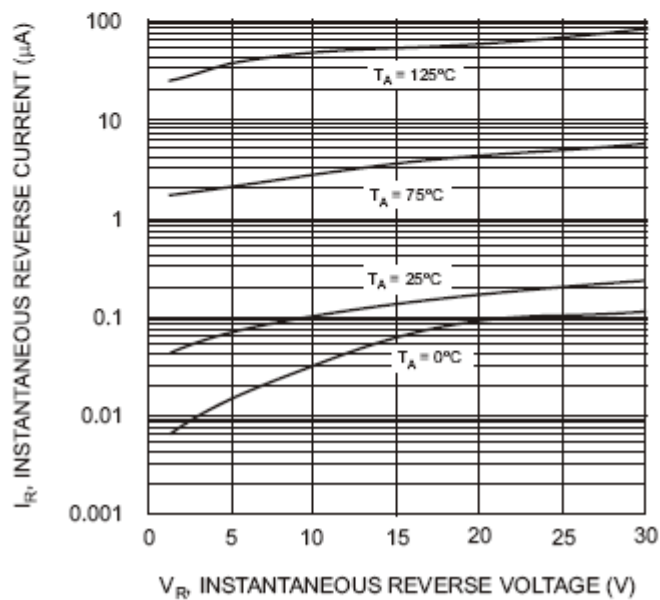


Fig. 3 Typical Reverse Characteristics

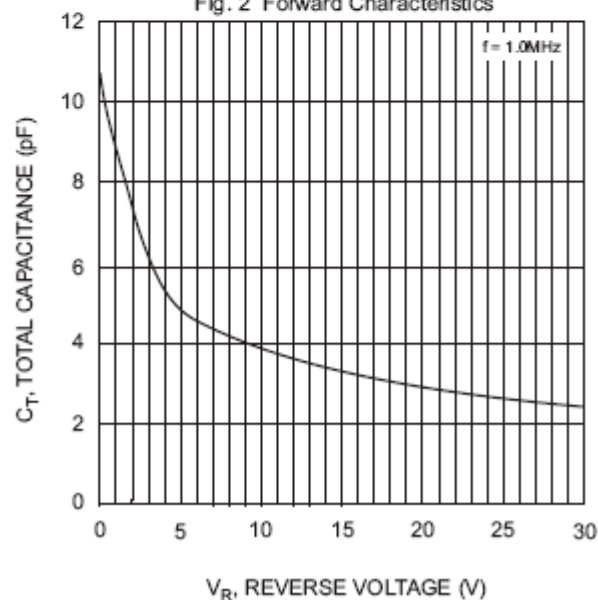


Fig. 4 Typical Capacitance vs. Reverse Voltage