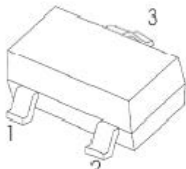
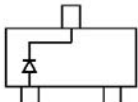
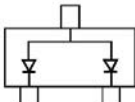
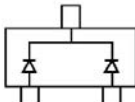
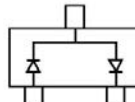
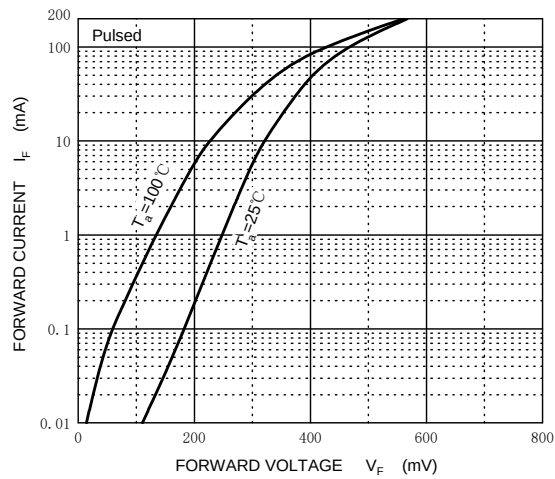


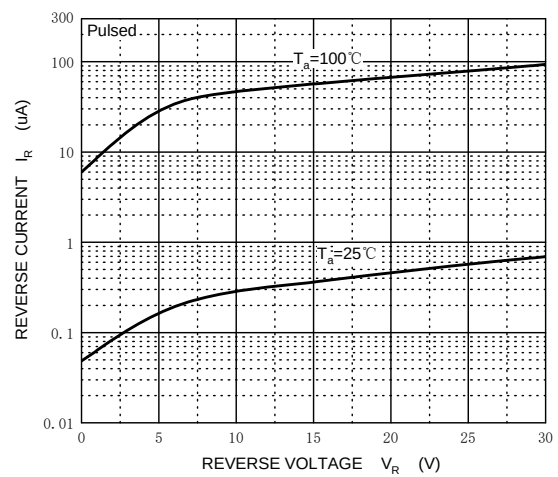
SCHOTTKY BARRIER DIODE		SOT-323 Plastic-Encapsulate Diodes				
SOT-323 		Features - Extremely Fast Switching Speed - Low forward voltage				
BAT54W Marking: KL5 BAT54AW Marking: KL6 BAT54CW Marking: KL7 BAT54SW Marking: KL8						
MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)						
Parameter		Symbol	Value	Unit		
Peak Repetitive Reverse Voltage		V_{RRM}	30	V		
Working Peak Reverse Voltage		V_{RWM}				
DC Blocking Voltage		V_R				
Forward Continuous Current		I_{FM}	200	mA		
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$		I_{FSM}	600	mA		
Repetitive Peak Forward Current @ $t\leq 1\text{s}, \delta\leq 0.5$		I_{FRM}	300	mA		
Power Dissipation		P_D	200	mW		
Thermal Resistance from Junction to Ambient		$R_{\theta JA}$	500	$^{\circ}\text{C/W}$		
Operating Junction Temperature Range		T_j	-40 ~ +125	$^{\circ}\text{C}$		
Storage Temperature Range		T_{stg}	-55 ~ +150	$^{\circ}\text{C}$		
ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)						
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	30			V
Reverse current	I_R	$V_R=25\text{V}$			2	μA
Forward voltage	V_F	$I_{F1}=0.1\text{mA}$			0.24	V
		$I_{F2}=1\text{mA}$			0.32	V
		$I_{F3}=10\text{mA}$			0.40	V
		$I_{F4}=30\text{mA}$			0.50	V
		$I_{F5}=100\text{mA}$			1	V
Diode capacitance	C_D	$V_R=1\text{V}, f=1\text{MHz}$			10	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1\times I_R, R_L=100\Omega$			5	ns

Typical Characteristics

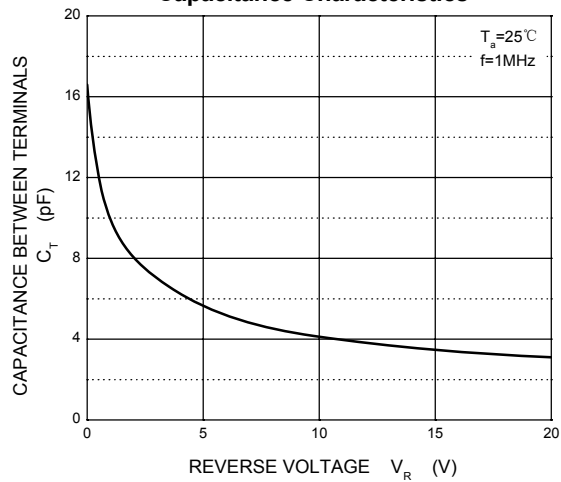
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

