

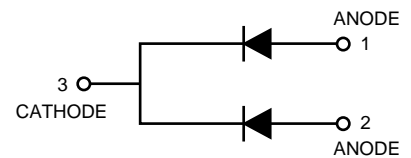
Schottky Barrier Diode

30VOLT
BAT54RCLT1 is LRC
Preferred Device

These Schottky barrier diodes are designed for high speed switching applications, circuit protection, and voltage clamping. Extremely low forward voltage reduces conduction loss. Miniature surface mount package is excellent for hand held and portable applications where space is limited.

◆ Extremely Fast Switching Speed

BAT54RCLT1



MAXIMUM RATINGS (T_J=125°C unless otherwise noted)

Rating	Symbol	Value	Unit
Reverse Voltage	VR	30	Volts
Forward Power Dissipation @ TA=25°C Derate above 25°C	PF	225 1.8	mW mW / °C
Operating Junction Temperature Range	TJ	-55 to +150	°C
Storage Temperature Range	TSTG	-55 to +150	°C

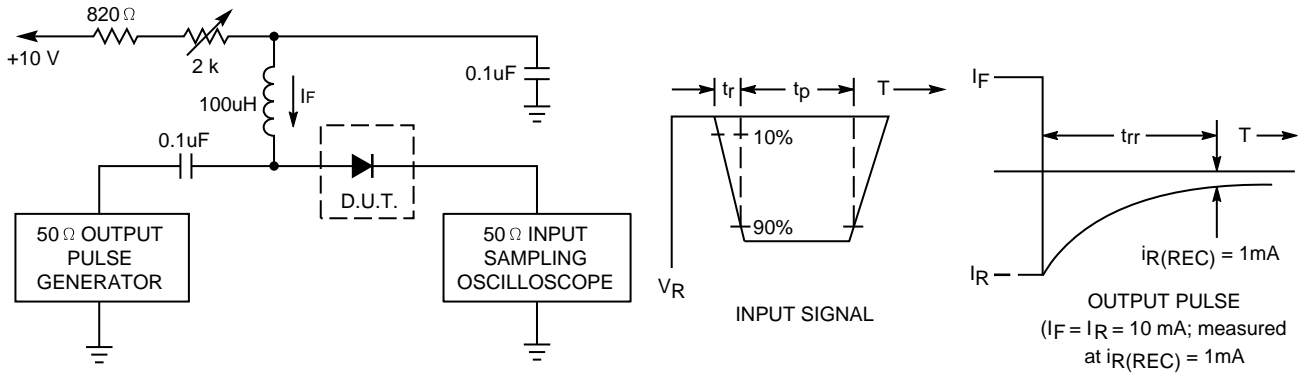
DEVICE MARKING

BAT54RCLT1=KL3

ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Characteristic	Symbol	Min.	Typ.	Max.	Unit	
Reverse Leakage (VR=25V)	IR	-	-	2	uA	
Forward Voltage	VF	(IF=0.1mAdc)	-	-	240	mV
		(IF=1.0mAdc)	-	-	320	
		(IF=10mAdc)	-	-	400	
		(IF=30mAdc)	-	-	500	
		(IF=100mAdc)	-	-	1000	
Total Capacitance (VR=1.0V, f=1.0MHZ)	CJ	-	-	16	pF	

FIGURE 1. RECOVERY TIME EQUIVALENT TEST CIRCUIT



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

FIGURE 2. FORWARD VOLTAGE

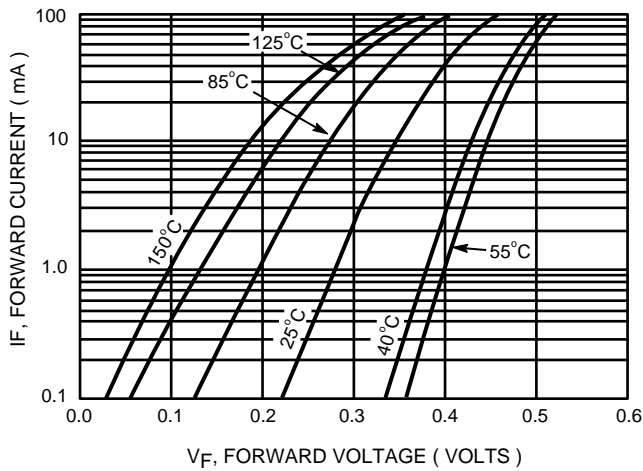


FIGURE 3. LEAKAGE CURRENT

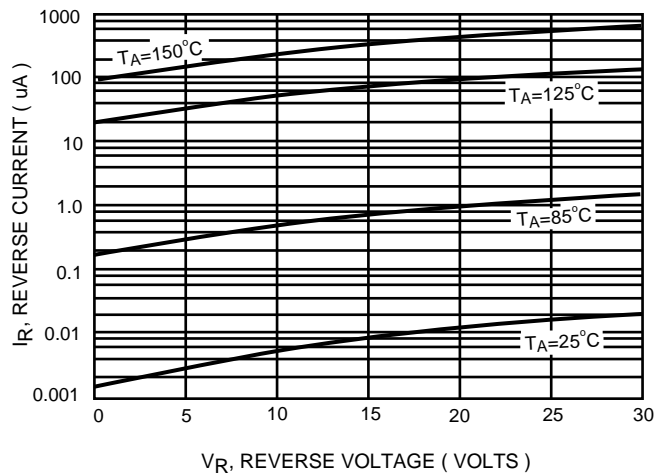


FIGURE 4. TOTAL CAPACITANCE

