

Schottky Barrier Diode

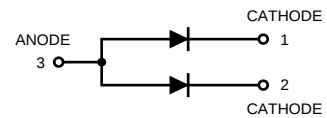
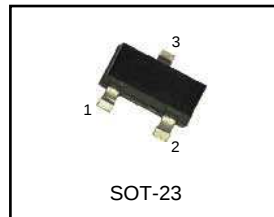
Lead free product

Halogen-free type

 30 VOLTS
 SCHOTTKY BARRIER
 DETECTOR AND SWITCHING
 DIODE

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.

- * Lead free product
- * Extremely Fast Switching Speed
- * Low Forward Voltage-0.35 Volts (Typ) @ IF=10mAdc

BAT54RAGH


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

Rating	Symbol	Value	Unit
Reverse Voltage	V _R	30	Volts
Forward Power Dissipation @ T _A =25°C Derate above 25°C	P _F	225 1.8	mW mW / °C
Forward Current (DC)	I _F	200 Max	mA
Operating Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

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

Characteristic	Symbol	Min.	Typ.	Max.	Unit
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OFF CHARACTERISTICS

Reverse Breakdown Voltage (I _R =10 uAdc)	V _(BR)	30	-	-	Volts
Forward Voltage (I _F =0.1 mAdc) (I _F =1.0 mAdc) (I _F =10 mAdc) (I _F =30 mAdc) (I _F =100 mAdc)	V _F	- - - - -	0.22 0.29 0.35 0.41 0.52	0.24 0.32 0.40 0.50 1.00	Vdc
Reverse Leakage (V _R =25 Vdc)	I _R	-	0.5	2.0	uAdc
Diode Capacitance (V _R =1.0V, f=1.0MHz)	C _J	-	7.6	10	pF
Reverse Recovery Time (I _F =I _R =10 mAdc, I _R (REC)=1.0mAdc)	trr	-	-	5.0	nS

FIGURE 1. RECOVERY TIME EQUIVALENT TEST CIRCUIT

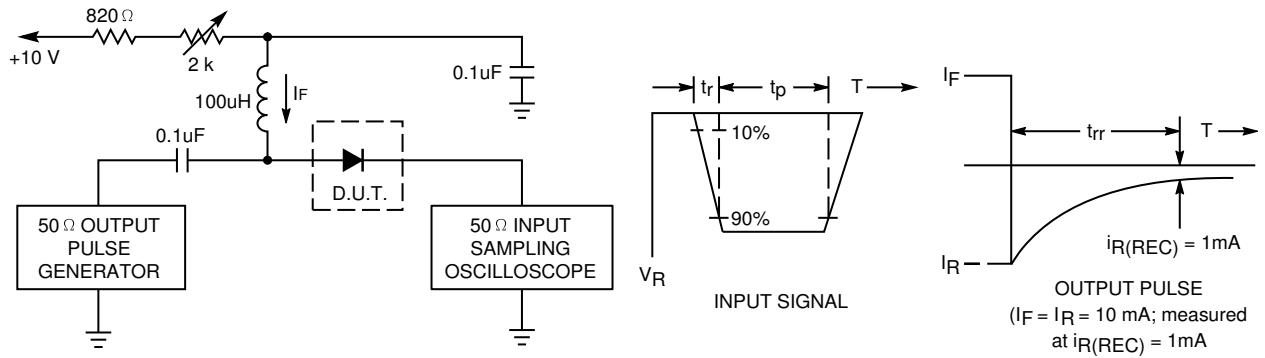


FIGURE 2. FORWARD VOLTAGE

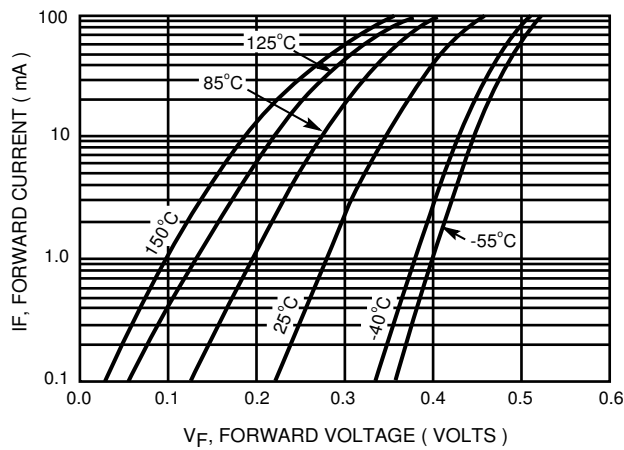


FIGURE 3. LEAKAGE CURRENT

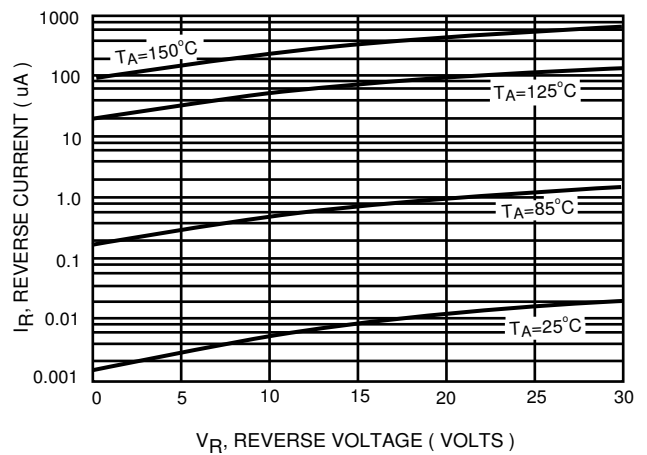


FIGURE 4. TOTAL CAPACITANCE

