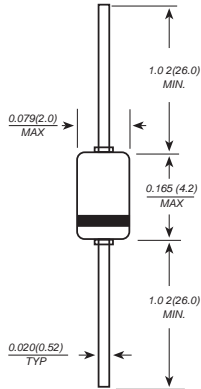


BAT85

SMALL SIGNAL SCHOTTKY DIODES

Reverse Voltage - 30 Volts P_{tot} - 200 mW

DO-35(GLASS)



Dimensions in inches and (millimeters)

FEATURES

- ◆ Fast switching for high efficiency
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed
250°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: DO-35 glass case

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.005 ounce, 0.14 grams

ABSOLUTE RATINGS

	SYMBOLS	Value	UNITS
Repetitive peak reverse voltage	V_{RRM}	30	V
Forward continuous current $T_A=25^\circ\text{C}$	I_F	200*	mA
Repetitive peak forward current at $t_p<1s, d<0.5, T_A=25^\circ\text{C}$	I_{FM}	300*	mA
Surge forward current at $t_p<10ms, T_A=25^\circ\text{C}$	I_{FSM}	600*	mA
Power dissipation at $T_A=65^\circ\text{C}$	P_{tot}	200*	mW
Junction temperature	T_J	125*	$^\circ\text{C}$
Ambient operating temperature range	T_A	-65 to +125	$^\circ\text{C}$
Storage temperature range	T_{STG}	-65 to +125	$^\circ\text{C}$

*Valid provided that that leads at a distance of 4mm from case are kept at ambient temperature

ELECTRICAL CHARACTERISTICS

	SYMBOLS	Min.	Typ.	Max.	UNITS
Reverse breakdown voltage tested with 100mA pulses	$V_{(BR)R}$	30			V
Forward voltage					
Pulse test $t_p<300ms, d<2\%$					
at $I_F=0.1mA$				0.24	
at $I_F=1mA$	V_F		0.50	0.32	V
at $I_F=10mA$				0.4	
at $I_F=30mA$					
at $I_F=100mA$				0.8	
Leakage current $V_R=25V$	I_R			2	μA
Junction capacitance at $V_R=1V, f=1MHz$	C_J			10	pF
Reverse recovery time $I_F=10mA, I_R=10mA, I_{rr}=1mA$	t_{rr}			5	ns
Thermal resistance junction to ambient	R_{qJA}			300*	K/W

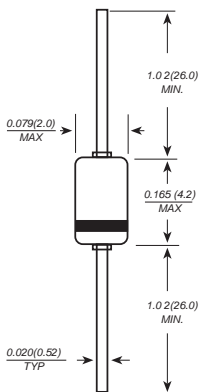
*Valid provided that leads at a distance of 4mm from case are kept at ambient temperature

BAT86

SMALL SIGNAL SCHOTTKY DIODES

Reverse Voltage - 50 Volts P_{tot} - 200 mW

DO-35(GLASS)



Dimensions in inches and (millimeters)

FEATURES

- ◆ Fast switching for high efficiency
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed
250°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: DO-35 glass case

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.005 ounce, 0.14 grams

ABSOLUTE RATINGS

	SYMBOLS	Value	UNITS
Continuous reverse voltage	V_{RRM}	50	V
Forward continuous current at $T_A=25^\circ\text{C}$	I_F	200*	mA
Repetitive peak forward current at $t_p < 1\text{s}$, $d < 0.5$, $T_A=25^\circ\text{C}$	I_{FSM}	300*	mA
Power dissipation at $T_A=65^\circ\text{C}$	P_{tot}	200*	mW
Junction temperature	T_J	125	$^\circ\text{C}$
Ambient operating temperature range	T_A	-65 to +125	$^\circ\text{C}$
Storage temperature range	T_{STG}	-65 to +125	$^\circ\text{C}$

*Valid provided that that leads at a distance of 4mm from case are kept at ambient temperature

ELECTRICAL CHARACTERISTICS

	SYMBOLS	Min.	Typ.	Max.	UNITS
Reverse breakdown voltage tested with 100mA pulses	$V_{(BR)R}$	50			V
Forward voltage Pulse test $t_p < 300\text{ms}$, $d < 2\%$ at $I_F=0.1\text{mA}$ at $I_F=1\text{mA}$ at $I_F=10\text{mA}$ at $I_F=30\text{mA}$ at $I_F=100\text{mA}$	V_F		0.200 0.272 0.365 0.460 0.700	0.300 0.380 0.450 0.600 0.900	V
Leakage current $V_R=25\text{V}$	I_R		0.2	0.5	mA
Junction capacitance at $V_R=1\text{V}$, $f=1\text{MHz}$	C_J			8	pF
Reverse recovery time $I_F=10\text{mA}$, $I_R=10\text{mA}$, $I_{rr}=1\text{mA}$	t_{rr}			5	ns
Thermal resistance junction to ambient	R_{qJA}			300*	K/mW

*Valid provided that that leads at a distance of 4mm from case are kept at ambient temperature