



BHT18

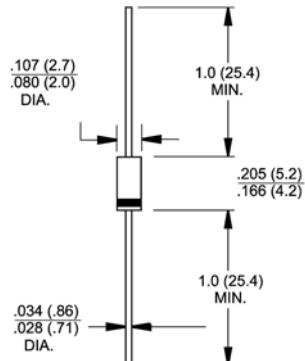
Electronic Lamp Ballasts Rectifier
Reverse Voltage 1100 Volts Forward Current 1.0 Ampere

Features

- ◆ Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge capability
- ◆ High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension



DO-204AL (DO-41)



Mechanical Data

- ◆ Case: JEDEC DO-204AL (DO-41), molded plastic body
- ◆ Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
- ◆ Polarity: Color band denotes cathode end
- ◆ Mounting Position: Any
- ◆ Weight: 0.012 ounce, 0.33 gram

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Dimensions in inches and (millimeters)

Parameter	Symbols	BHT18	Units
Maximum repetitive peak reverse voltage	V_{RRM}	1100	Volts
Maximum RMS voltage	V_{RMS}	770	Volts
Maximum DC blocking voltage	V_{DC}	1100	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A=75^\circ\text{C}$	$I_{F(AV)}$	1.0	Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) $T_A=75^\circ\text{C}$	I_{FSM}	30.0	Amps
Maximum full load reverse current, full cycle average 0.375" (9.5mm) lead length at $T_A=75^\circ\text{C}$	$I_{R(AV)}$	30	μA
Maximum instantaneous forward voltage at 1.0A	V_F	1.0	Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$	I_R	1.0 30	μA
Typical reverse recovery time at $I_{FR}=20\text{mA}$, $I_{RR}=1\text{mA}$ (Note 2)	t_{rr}	1.0	μs
Typical junction capacitance at 4.0V, 1MHz	C_J	15	pF
Typical thermal resistance (Note 1)	R_{QJA} R_{QUL}	50.0 25.0	$^\circ\text{C/W}$
Maximum DC blocking voltage temperature	T_A	+125	$^\circ\text{C}$
Operating junction and storage temperature range	T_J , T_{STG}	-55 to +150	$^\circ\text{C}$

Notes:

1. Thermal resistance from junction to ambient, and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted
2. Measured on Tektronix type "S" recovery plug-in. Tektronix 545 scope or equivalent

RATINGS AND CHARACTERISTIC CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

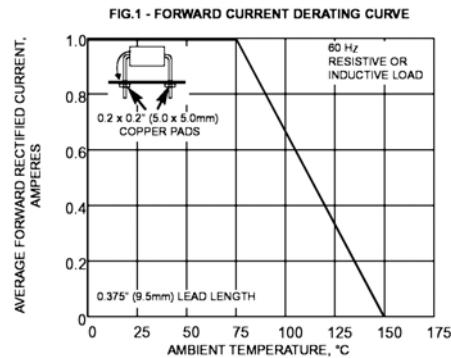


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

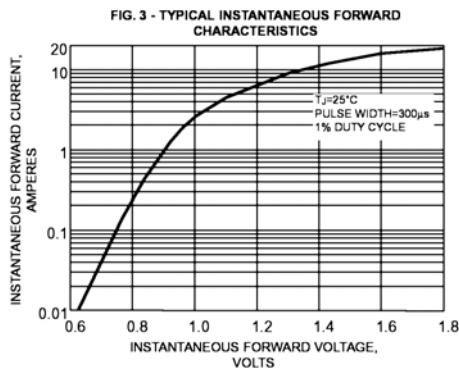
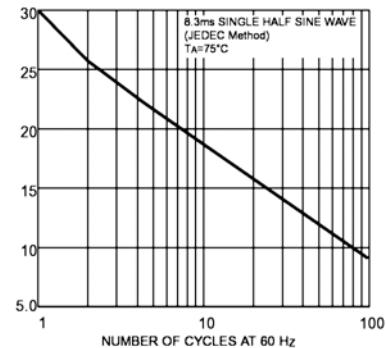


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

