GOOD-ARK

BHT18G

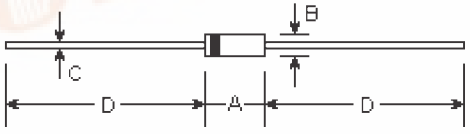
ELECTRONIC LAMP BALLASTS RECTIFIER

Reverse Voltage - 1100 Volts
Forward Current - 1.0 Ampere

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature metallurgically bonded construction
- Glass passivated cavity-free junction
- Capable of meeting environmental standards of MIL-S-19500
- 1.0 ampere operation at T_A=75℃ with no thermal runaway
- Typical I_R less than 0.1 μA
- High temperature soldering guaranteed: 350℃/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3Kg) tension

DO-41



Mechanical Data

- **Case:** DO-41 molded plastic over glass 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, 0.335 gram

DIMENSIONS					
DIM	inches		mm		Note
	Min.	Max.	Min.	Max.	
A	0.165	0.205	4.2	5.2	
B	0.079	0.106	2.0	2.7	ф
C	0.028	0.034	0.71	0.86	ф
D	1.000	-	25.40	-	

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

	Symbols	BHT18G	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℃	$I_{(AV)}$	1.0	Amp
Peak forward surge current 8.3mS single half sine-wave superimposed on rated load (MIL-STD-750D 4066 method)	I_{FSM}	30.0	Amps
Maximum instantaneous forward voltage at 1.0A	V_F	1.0	Volts
Maximum full load reverse current, full cycle average 0.375" (9.5mm) lead length at T_A=75℃	$I_{R(AV)}$	30.0	μA
Maximum DC reverse current at rated DC blocking voltage T_A=25℃ T_A=100℃	I_R	1.0 30.0	μA
Typical reverse recovery time (Note 1)	T_{rr}	2.0	μS
Typical junction capacitance (Note 2)	C_J	8.0	ρF
Typical thermal resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	55.0 25.0	℃/W
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175	℃

Notes:
(1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
(2) Measured at 1.0MHz and applied reverse voltage of 4.0 volts

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - FORWARD CURRENT DERATING CURVE

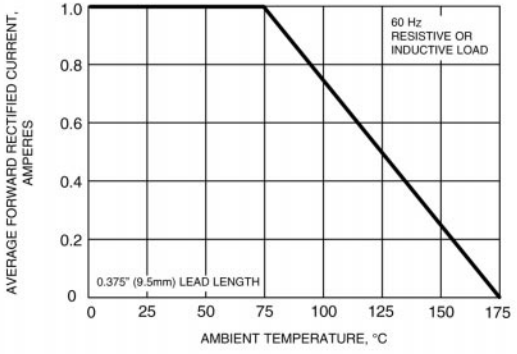


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

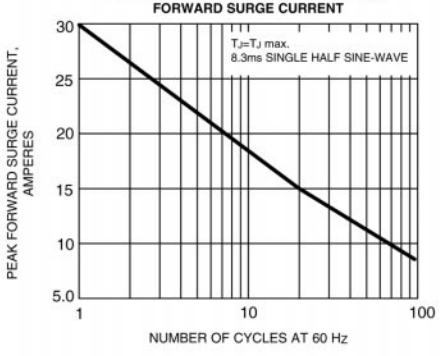


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

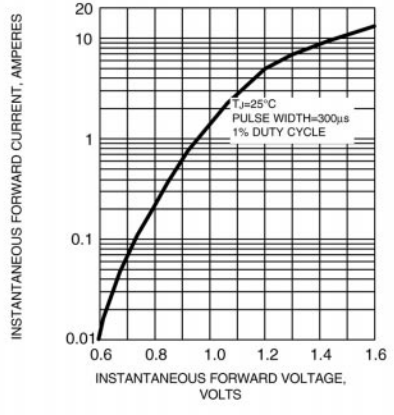


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

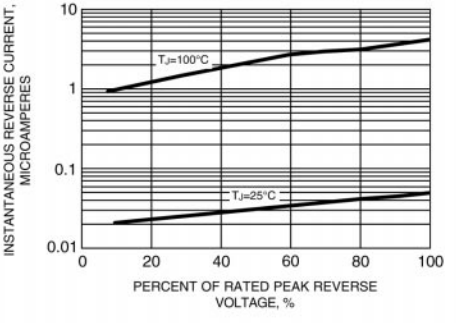


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

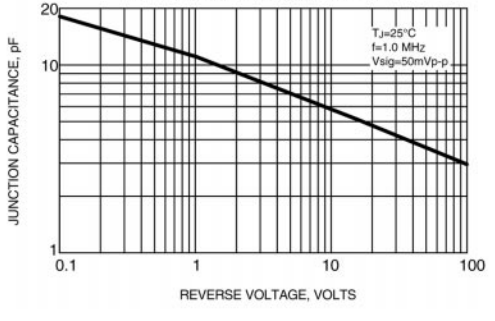


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE