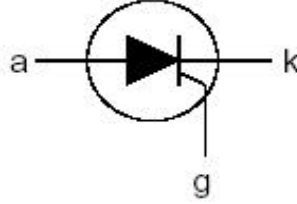
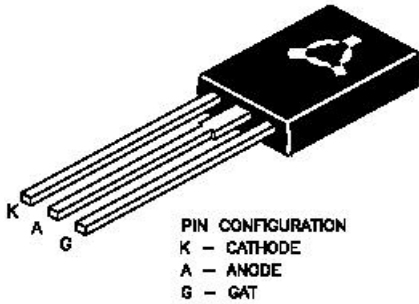


**THYRISTOR**

**BT148-600**

**TO-126  
Plastic Package**



For use in General Purpose Switching and Phase Control Applications

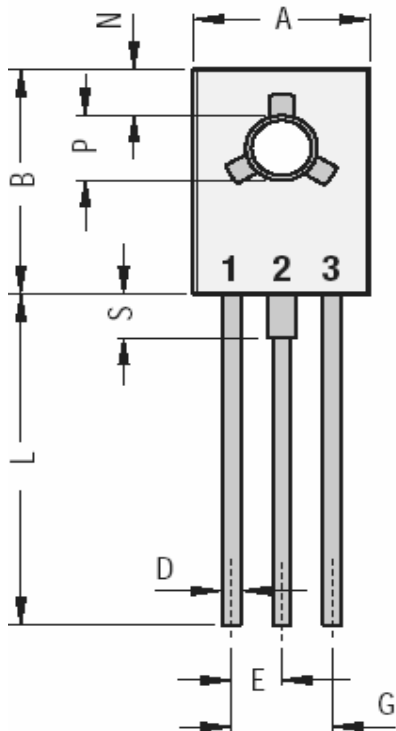
**ABSOLUTE MAXIMUM RATINGS**

PARAMETER	SYMBOL	VALUE	UNIT
Repetitive Peak Off State Voltage	$V_{DRM}, V_{RRM}$	600	V
Average On State Current	$I_T (AV)$	2.5	A
RMS On State Current	$I_T (RMS)$	4.0	A
Non Repetitive Peak On State Current	$I_{TSM}$	35	A
$I^2t$ for Fusing	$I^2t$	6.1	A <sup>2</sup> s
Repetitive Rate of Rise of On State Current After Triggering	di/dt	50	A/ $\mu$ s
Peak Gate Current	$I_{GM}$	2.0	A
Peak Gate Power	$P_{GM}$	5.0	W
Average Gate Power	$P_G (AV)$	0.5	W
Storage Temperature	$T_{stg}$	- 40 to +150	°C
Operating Junction Temperature	$T_j$	125	°C

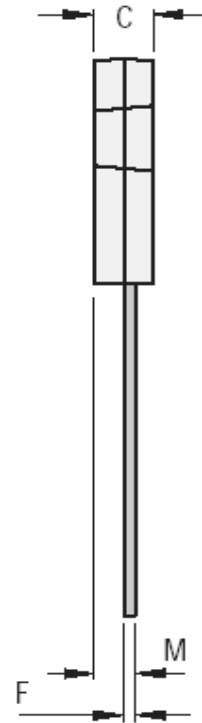
**ELECTRICAL CHARACTERISTICS ( $T_j=25^\circ\text{C}$  unless specified otherwise)**

PARAMETER	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Gate Trigger Current	$I_{GT}$	$V_D=12V, I_T=0.1A$		0.2	mA
Gate Trigger Voltage	$V_{GT}$	$V_D=12V, I_T=0.1A$		1.5	V
Latching Current	$I_L$	$V_D=12V, I_{GT}=0.1A$		10	mA
Holding Current	$I_H$	$V_D=12V, I_{GT}=0.1A$		6.0	mA
On State Voltage	$V_{TM}$	$I_T=5A$		1.8	V
Off State Leakage Current	$I_{DRM}, I_{RRM}$	$V_{DRM}=V_{RRM}=600V T_j=125^\circ\text{C}$		0.5	mA

TO-126 Leaded Plastic Package



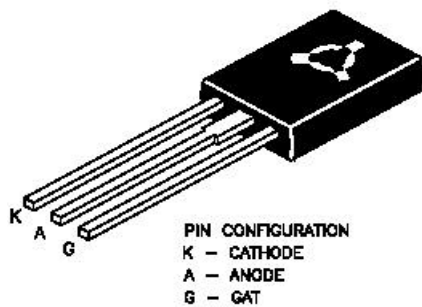
Pin 1: Cathode  
Pin 2: Anode  
Pin 3: Gate



DIM	Min	Max
A	7.40	7.80
B	10.50	10.80
C	2.40	2.70
D	0.640	0.880
E	2.25 Typ	
F	0.39	0.63

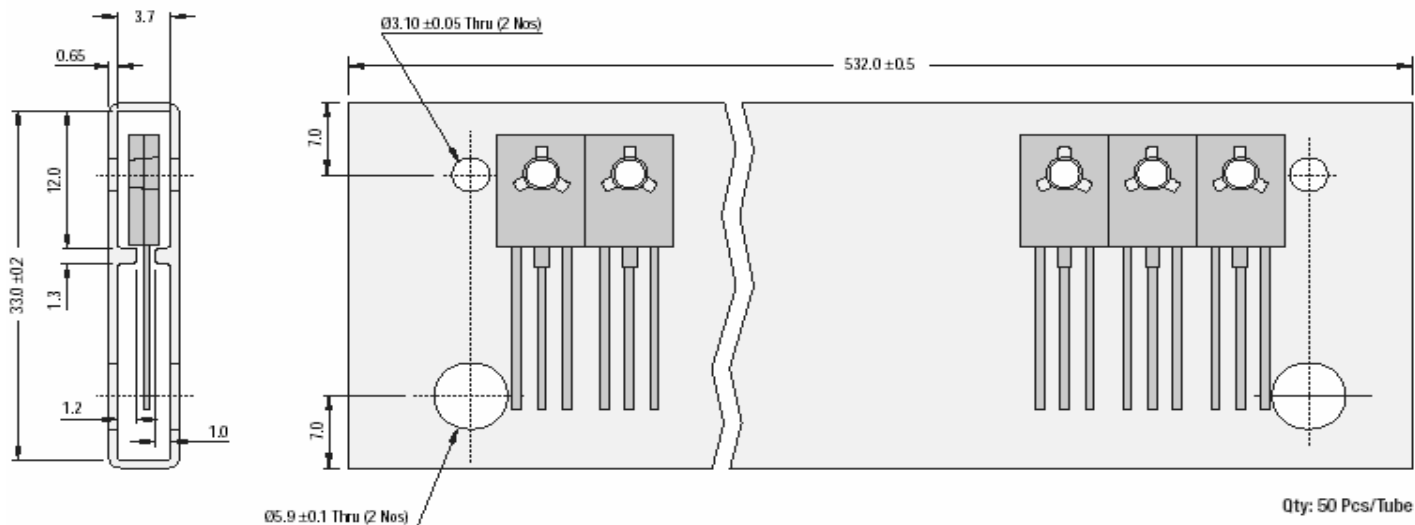
All Dimensions are in mm

DIM	Min	Max
G	4.5 Typ	
L	15.7 Typ	
M	1.27 Typ	
N	3.75 Typ	
P	2.90	3.2
S	2.5 Typ	



PIN CONFIGURATION  
K - CATHODE  
A - ANODE  
G - GAT

TO-126 Packaging Tube



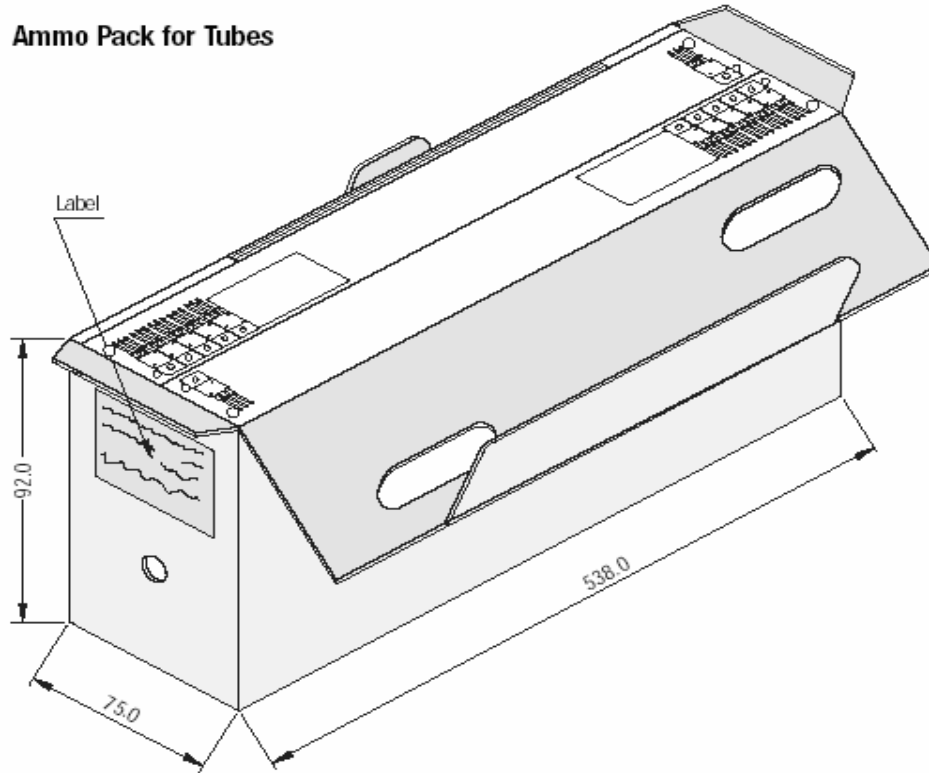
All Dimensions are in mm

Packaging Information

Package/ Case Type	Packaging Type	Std. Packing Qty	Inner Carton			Outer Carton		
			Qty	Size L x W x H (cm)	Gross Weight (Kg)	Qty	Size L x W x H (cm)	Gross Weight (Kg)
TO-126	Bulk	2,000	2K	19 x 19 x 8	1.44	20K	46 x 38 x 22	15.6
	Tube	1000 (50 pcs/tube)	1K	55 x 8 x 10	1.52	10K	55 x 35 x 27	16.3

Bulk: Loose in poly bags  
 Tube: Tube and Ammo Pack  
 K: 1,000

## Ammo Packaging for Tubes



All Dimensions are in mm

### Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

### Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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