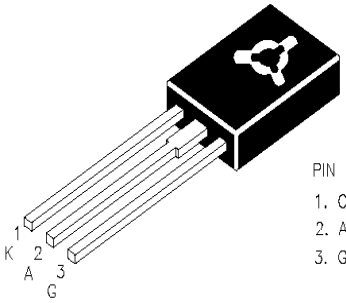
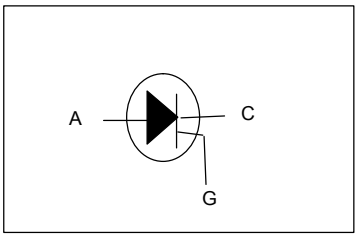
THYRISTOR

C106D

TO-126
THYRISTOR



PIN CONFIGURATION:–
1. CATHODE
2. ANODE
3. GATE



C106D SCR is suitable to fit all models of control.
Found in applications such as overvoltage crowbar protection , Motor control circuits in power tools and kitchen aids , current limiting circuits , capacitive discharge ignition and voltage regulation circuits.

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	TEST CONDITION	VALUE	UNIT
RMS On-State current (Full sine wave) ; Tc=90°C	$I_{T(RMS)}$	-	4	A
Non repetitive surge peak on-state current (Full Cycle, Tj=25°C)	I_{TSM}	f = 50Hz, t = 20ms	40	A
I^2t Value for fusing	I^2t	Tp=10ms	6	A^2s
Critical rate of rise of on-state current.	di/dt	f = 120Hz, Tj=125°C	50	A/us
Peak Gate current	I_{GM}	Tp=20u_s, Tj=125°C	1.5	A
Average gate power dissipation	$P_{G(AV)}$	Tj=125°C	0.3	W
Storage Junction temperature range	Tstg	-	-40 -+ 150	°C
Operating Junction temperature range	Tj	-	-40 -+ 125	°C

ELECTRICAL CHARACTERISTICS (T_J=25ºC unless specified otherwise)

PARAMETER	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Repetitive Peak Off State Forward , Reverse Voltage	VDRM, VRRM		600		V
Gate Trigger Current	I_{GT}	V_D=12V, I_T=0.1A	5	200.0	u A
Gate Trigger Voltage	V_{GT}	V_D=12V, I_T=0.1A		0.8	V
Holding Current	I_H	V_D=12V, I_{GT}=0.1A		5	mA
Critical Rate of Rise of off State Voltage	dv/dt	V_D=67% V_{DRM}	15		V/us
Peak Forward on State Voltage	V_{TM}	I_T=8A		1.8	V
Repetitive Peak Off State Forward ,Reverse Blocking Current	IDRM, IRRM	VD=VDRM, Tj=25°C		5	u A

THERMAL RESISTANCES					
PARAMETER	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Junction to Case (AC)	$R_{th\ (j-c)}$	-	15		°C/W
Junction to Ambient	$R_{th\ (j-a)}$	-	100		°C/W

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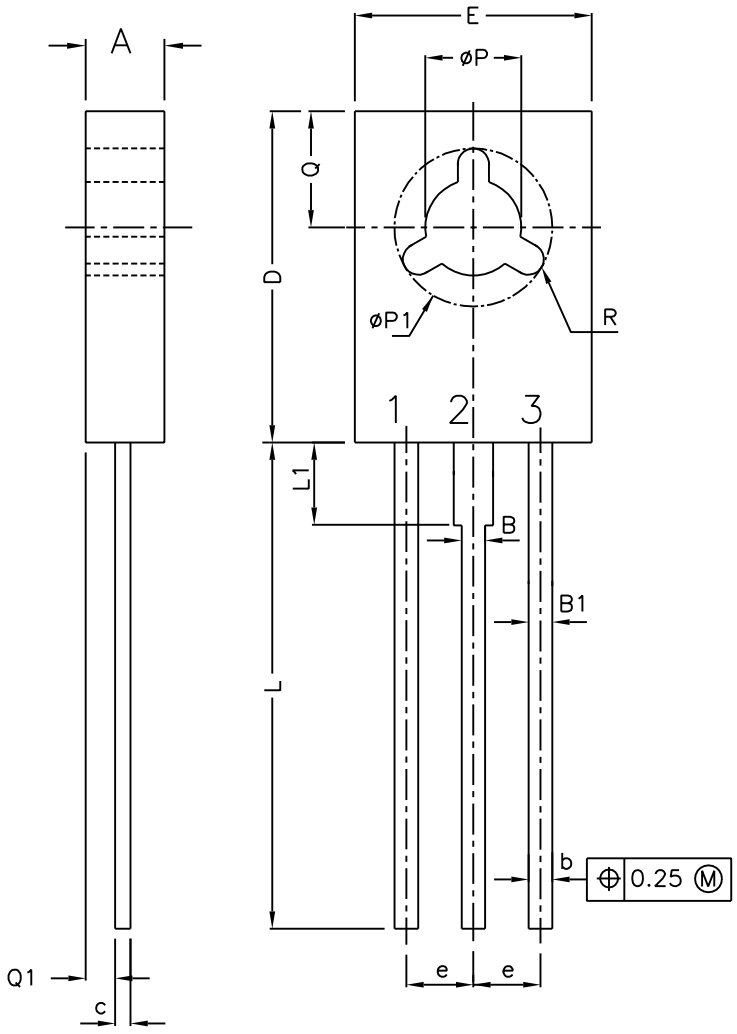
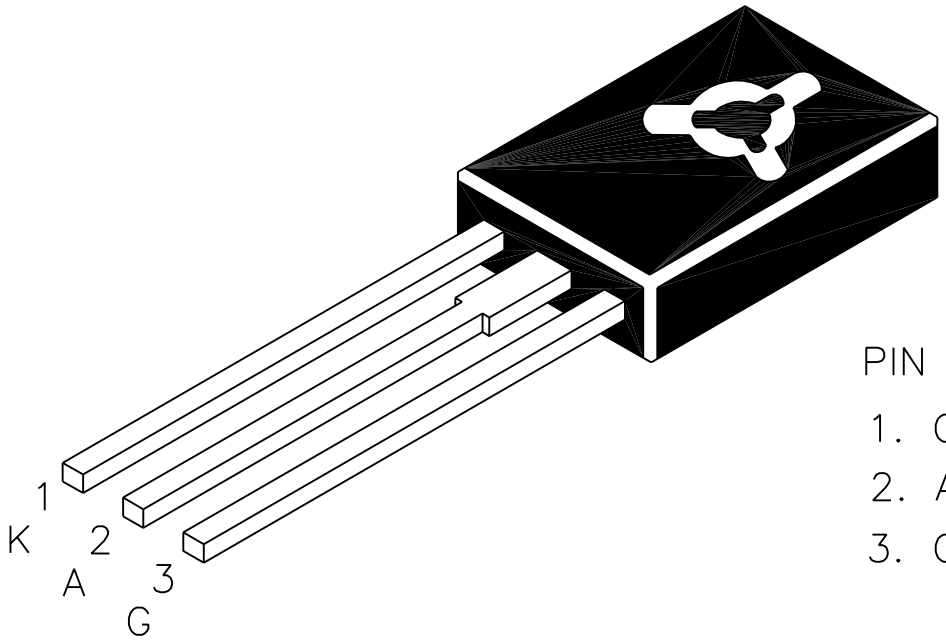
PACKAGE TO-126



DIM	MIN.	NOM.	MAX.
A	2.3		2.8
B	1.0		1.2
B1	0.8		1.0
b	0.65		0.88
c	0.45		0.60
D	10.5		11.1
E	7.2		7.8
e		2.29	
L	15.3		16.5
L1			2.54
øP	3.0		3.2
øP1		5.0	
Q	3.6		4.4
Q1	0.9		1.5
R		0.5	

ALL DIMENSIONS ARE IN mm



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Disclaimer

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