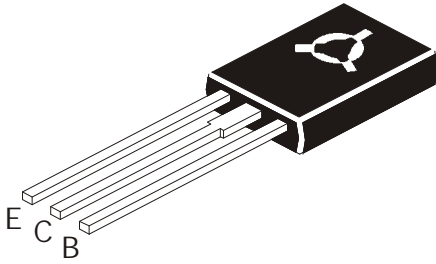


NPN EPITAXIAL SILICON POWER TRANSISTOR

CSC3420

TO-126
Plastic Package



Strobe Flash and Medium Power Amplifier Applications

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

DESCRIPTION	SYMBOL	Value	UNIT
Collector Base Voltage	V _{CBO}	50	V
Collector Emitter Voltage	V _{CES}	40	V
Collector Emitter Voltage	V _{CEO}	20	V
Emitter Base Voltage	V _{EBO}	8.0	V
Collector Current (DC)	I _C	5.0	A
Collector Current (Pulse)	*I _{CP}	8.0	A
Base Current	I _B	1.0	A
Collector Power Dissipation T _a =25°C	P _C	1.5	W
Collector Power Dissipation T _c =25°C	P _C	10	W
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _{stg}	- 55 to +150	°C

*Pulse Width : Pulse Width=10ms, Duty Cycle=30%

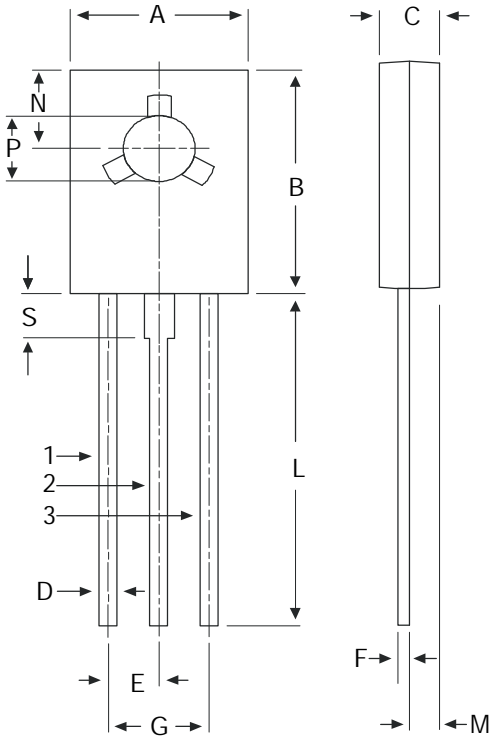
ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Cut Off Current	I _{CBO}	V _{CB} =40V, I _E =0			100	nA
Emitter Cut Off Current	I _{EBO}	V _{EB} =8V, I _C =0			100	nA
Collector Emitter Voltage	V _{CEO}	I _C =10mA, I _B =0	20			V
DC Current Gain	h _{FE}	*V _{CE} =2V, I _C =0.5A V _{CE} =2V, I _C =4A	140 70		600	
Collector Emitter Saturation Voltage	V _{CE(sat)}	I _C =4A, I _B =0.1A			1.0	V
Base Emitter On Voltage	V _{BE(on)}	V _{CE} =2V, I _C =4A			1.5	V
Transition Frequency	f _T	V _{CE} =2V, I _C =0.5A		100		MHz
Collector Output Capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		40		pF

*h_{FE} Classification Y : 140 - 240 , GR : 200 - 400 : BL : 300 - 600

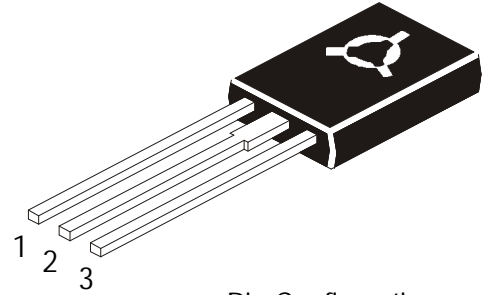
CSC3420Rev150606E

TO-126 (SOT-32) Plastic Package



DIM	MIN	MAX
A	7.4	7.8
B	10.5	10.8
C	2.4	2.7
D	0.7	0.9
E	2.25 TYP.	
F	0.49	0.75
G	4.5 TYP.	
L	15.7 TYP.	
M	1.27 TYP.	
N	3.75 TYP.	
P	3.0	3.2
S	2.5 TYP.	

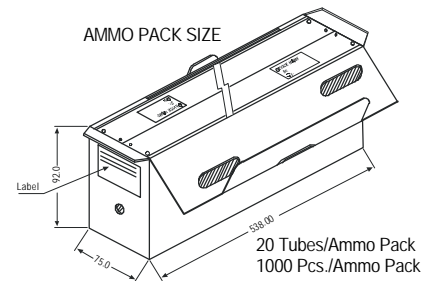
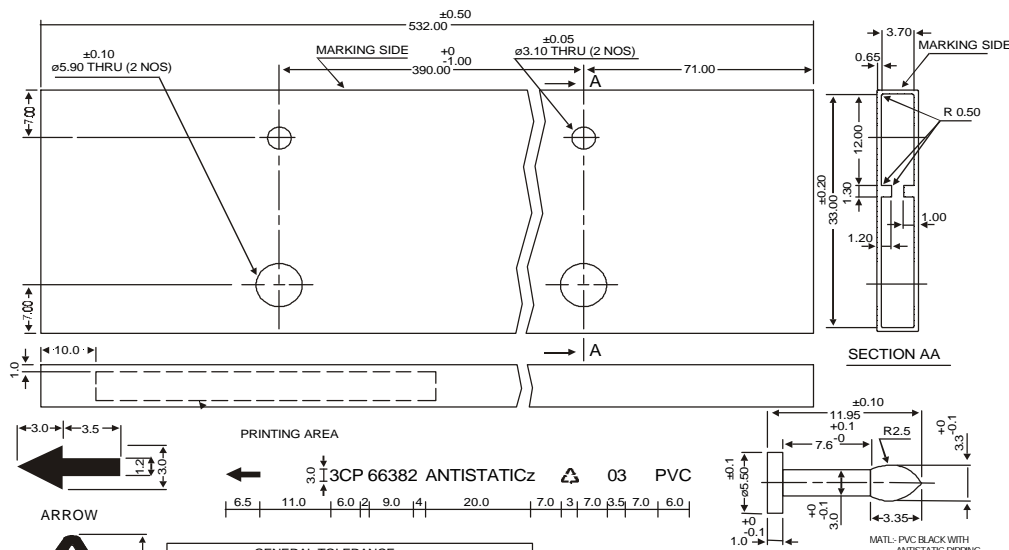
All dimensions in mm.



Pin Configuration

1. Emitter
2. Collector
3. Base

TO-126 TUBE PACKING



AMMO PACK SIZE

20 Tubes/Ammo Pack
1000 Pcs./Ammo Pack

GENERAL TOLERANCE					
0 mm	0.01 mm	30.01 mm	120.01 mm	ABOVE 315 mm	ANGULAR
5 mm	30 mm	120 mm	315 mm		
±0.1	±0.2	±0.3	±0.5	±0.8	±0° 30'

All dimensions in mm

- Notes:
1. All print in black.
 2. All text in Helvetia medium font.

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-126 Bulk	500 pcs/polybag	340 gm/500 pcs	3" x 7.5" x 7.5"	2K	17" x 15" x 13.5"	32K	31 kgs
TO-126 Tube	50 pcs/tube	73 gm/50 pcs	3" x 3.7" x 21.5"	1K	19" x 19" x 19"	10K	15 kgs

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 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 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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