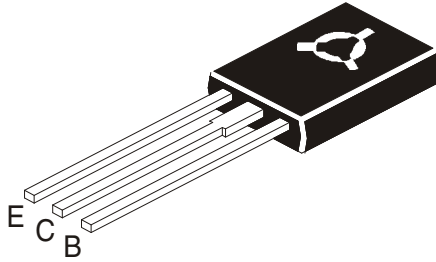


NPN EPITAXIAL SILICON POWER TRANSISTOR

CDL6718



TO126
Plastic Package

For Lead Free Parts, Device
Part # will be Prefixed with "T"

General Purpose Medium Power Amplifier and Switching Applications.

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector Base Voltage	V_{CBO}	100	V
Collector Emitter Voltage	V_{CEO}	100	V
Emitter Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	1.0	A
Total Power Dissipation at $T_a=25^\circ\text{C}$	P_D	1.6	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to 150	$^\circ\text{C}$

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

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Base Voltage	V_{CBO}	$I_C=100\mu\text{A}$, $I_E=0$	100			V
Collector Emitter Voltage	V_{CEO}	$I_C=1\text{mA}$, $I_B=0$	100			V
Emitter Base Voltage	V_{EBO}	$I_E=10\mu\text{A}$, $I_C=0$	5.0			V
Collector Cut Off Current	I_{CBO}	$V_{CB}=80\text{V}$, $I_E=0$			100	nA
Collector Emitter Saturation Voltage	$*V_{CE(sat)}$	$I_C=350\text{mA}$, $I_B=35\text{mA}$			0.35	V
DC Current Gain	$*h_{FE}$	$I_C=50\text{mA}$, $V_{CE}=1\text{V}$	80			
		$I_C=250\text{mA}$, $V_{CE}=1\text{V}$	50		250	
		$I_C=500\text{mA}$, $V_{CE}=1\text{V}$	20			
Transition frequency	f_T	$I_C=50\text{mA}$, $V_{CE}=10\text{V}$, $f=100\text{MHz}$	50			MHz
Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$, $f=1\text{MHz}$			20	pF

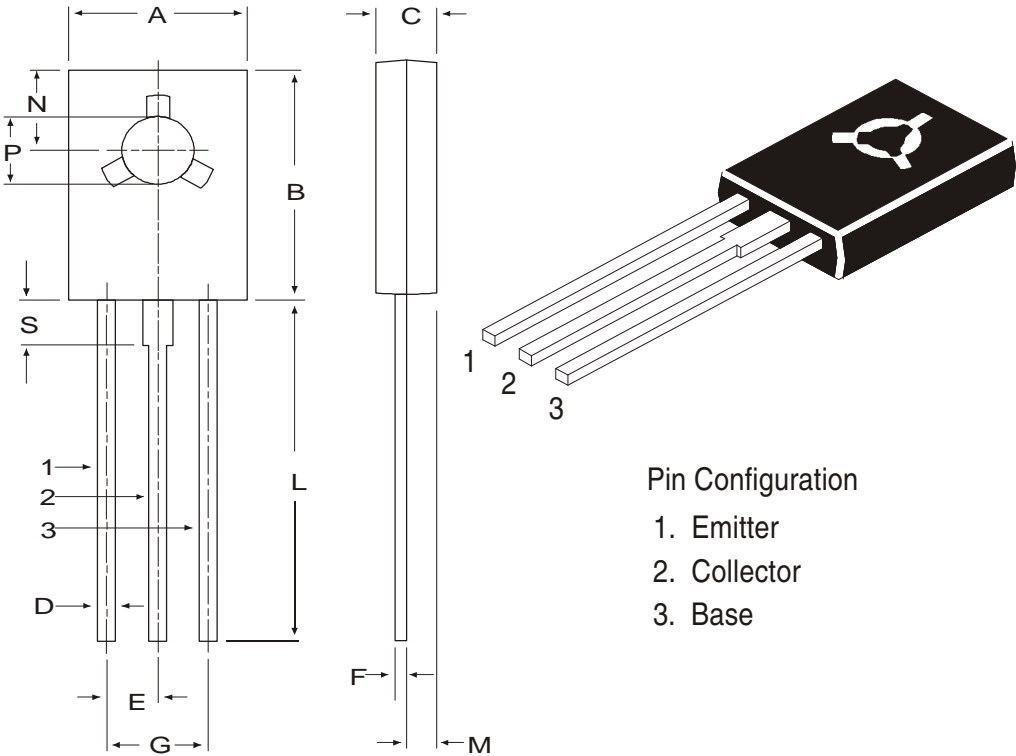
CDL6718Rev211005E

*Pulse Test: Pulse Width $\leq 380\mu\text{s}$, Duty Cycle $\leq 2\%$

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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 diminsions in mm.

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 I nstructions

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).

**TO126
Plastic Package**

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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 on the CDIL Web Site/CD is 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).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



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