Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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2N3740A

APPLICATIONS:

- **Drivers**
- **Switches**
- **Medium-Power Amplifiers**

FEATURES:

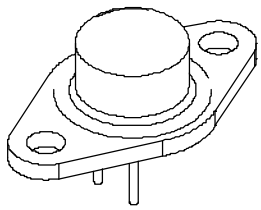
- **Low Saturation Voltage: 0.6 $V_{CE(sat)}$ @ I_C = 1.0 Amp**
- **High Gain Characteristics: hFE @ I_C = 250 mA: 30-100**
- **Excellent Safe Area Limits**
- **Low Collector Cutoff Current: 100 nA (Max) 2N3740A**

Medium Power PNP Transistors

DESCRIPTION:

These power transistors are produced by PPC's DOUBLE DIFFUSED PLANAR process. This technology produces high voltage devices with excellent switching speeds, frequency response, gain linearity, saturation voltages, high current gain, and safe operating areas. They are intended for use in Commercial, Industrial, and Military power switching, amplifier, and regulator applications.

Ultrasonically bonded leads and controlled die mount techniques are utilized to further increase the SOA capability and inherent reliability of these devices. The temperature range to 200°C permits reliable operation in high ambients, and the hermetically sealed package insures maximum reliability and long life.



TO-66

ABSOLUTE MAXIMUM RATINGS:

SYMBOL	CHARACTERISTIC	VALUE	UNITS
V_{CEO}*	Collector-Emitter Voltage	60	Vdc
V_{EB}*	Emitter-Base Voltage	7.0	Vdc
V_{CB}*	Collector-Base Voltage	60	Vdc
I_C*	Peak Collector Current	10	Adc
I_C*	Continuous Collector Current	4.0	Adc
I_B*	Base Current	2.0	Adc
T_{STG}*	Storage Temperature	-65 to 200	°C
T_J*	Operating Junction Temperature	-65 to 200	°C
P_D*	Total Device Dissipation T_C = 25°C	25	Watts
	Derate above 25°C	0.143	W/°C
θ JC	Thermal Impedance	7	°C/W

* **Indicates JEDEC registered data.**

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ELECTRICAL CHARACTERISTICS:
(25°C Case Temperature Unless Otherwise Noted)

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VALUE		Units
			Min.	Max.	
$V_{CEO(sus)}$*	Collector-Emitter Sustaining Voltage	I_C = 100 mAdc, I_B = 0 (Note 1)	60	----	Vdc
I_{EB0}*	Emitter Base Cutoff Current	V_{EB} = 7.0 Vdc	----	100	nAdc
I_{CEX}*	Collector Cutoff Current	V_{CE} = 60 Vdc, $V_{BE(off)}$ = 1.5 Vdc	----	100	nAdc
		V_{CE} = 40 Vdc, $V_{BE(off)}$ = 1.5 Vdc, T_C = 150°C	----	0.5	mAdc
I_{CEO}*	Collector-Emitter Cutoff Current	V_{CE} = 40 Vdc, I_B = 0	----	1.0	µAdc
I_{CBO}*	Collector Base Cutoff Current	V_{CB} = 60 Vdc, I_E = 0	----	100	nAdc
h_{FE}*	DC Current Gain (Note 1)	I_C = 100 mAdc, V_{CE} = 1.0 Vdc	40	----	----
		I_C = 250 mAdc, V_{CE} = 1.0 Vdc	30	100	----
		I_C = 500 mAdc, V_{CE} = 1.0 Vdc	20	----	----
		I_C = 1.0 Adc, V_{CE} = 1.0 Vdc	10	----	----
$V_{CE(sat)}$*	Collector-Emitter Saturation Voltage (Note 1)	I_C = 1.0 Adc, I_B = 125 mAdc	----	0.6	Vdc
V_{BE}*	Base-Emitter Voltage (Note 1)	I_C = 250 mAdc, V_{CE} = 1.0 Vdc	----	1.0	Vdc
f_T*	Current Gain Bandwidth Product	I_C = 100 mAdc, V_{CE} = 10 Vdc, f = 1.0 MHz	3.0	----	MHz
h_{fe}*	Small-Signal Current Gain	I_C = 50 mAdc, V_{CE} = 10 Vdc, f = 1.0 kHz	25	----	----
C_{ob}*	Common Base Output Capacitance	V_{CB} = 10 Vdc, I_C = 0, f = 100 kHz	----	100	pF

Note 1: Pulse Test: PW ≤ 300µs, Duty Cycle ≤ 2.0%

*** Indicates JEDEC registered data.**

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PACKAGE MECHANICAL DATA: