

# SILICON PNP MEDIUM POWER TRANSISTOR

**DESCRIPTION:**

The **2N3740** is a Medium Power Transistor for General Purpose Amplifier and Switching Applications.

**MAXIMUM RATINGS**

<b>I<sub>C</sub></b>	4.0 A
<b>V<sub>CEO</sub></b>	-60 V
<b>P<sub>DISS</sub></b>	25 W @ T <sub>C</sub> = 25 °C
<b>T<sub>J</sub></b>	-65 to +200 °C
<b>T<sub>STG</sub></b>	-65 to +200 °C
<b>θ<sub>JC</sub></b>	7 °C/W

**PACKAGE STYLE TO-66**

	INCHES	MILLIMETERS
A	620 MAX	15.75 MAX
B	.050 - .075	1.27 - 1.90
C	.250 - .340	6.35 - 8.63
D	360 MIN.	9.14 MIN.
E	.028 - .034 DIA.	.711 - .863
F	.958 - .962	24.33 - 24.43
G	.570 - .590	14.47 - 14.98
H	.145 MAX. RAD.	3.68 MAX. RAD.
J	.142 - .152 DIA.	3.60 - 3.86 DIA.
K	.350 MAX. RAD.	8.89 MAX. RAD.
L	.190 - .210	4.82 - 5.33
M	.093 - .107	2.36 - 2.72

**CHARACTERISTICS** T<sub>C</sub> = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
<b>BV<sub>CEO</sub></b>	I <sub>C</sub> = 100 mA	-60			<b>V</b>
<b>I<sub>CEX</sub></b>	V <sub>CE</sub> = -60 V    V <sub>BE</sub> = 1.5 V T <sub>C</sub> = 150 °C			0.1 1	<b>mA</b>
<b>I<sub>CB0</sub></b>	V <sub>CE</sub> = -60 V			100	<b>μA</b>
<b>I<sub>CEO</sub></b>	V <sub>CE</sub> = -40 V			1.0	<b>mA</b>
<b>I<sub>EBO</sub></b>	V <sub>EB</sub> = -7.0 V			500	<b>nA</b>
<b>h<sub>FE</sub></b>	V <sub>CE</sub> = -1.0 V    I <sub>C</sub> = 100 mA I <sub>C</sub> = 250 mA I <sub>C</sub> = 500 mA I <sub>C</sub> = 1.0 A	40 30 20 10		100	<b>---</b>
<b>V<sub>CE(SAT)</sub></b>	I <sub>C</sub> = 1.0 A    I <sub>B</sub> = 125 mA			-0.6	<b>V</b>
<b>V<sub>BE(ON)</sub></b>	V <sub>CE</sub> = -1.0 V    I <sub>C</sub> = 1.0 A			-1.0	<b>V</b>
<b>h<sub>fe</sub></b>	V <sub>CE</sub> = -10 V    I <sub>C</sub> = 50 mA    f = 1.0 KHz	25			<b>---</b>
<b>f<sub>T</sub></b>	V <sub>CE</sub> = -10 V    I <sub>C</sub> = 100 mA    f = 1.0 MHz	3.0			<b>MHz</b>
<b>C<sub>OB</sub></b>	V <sub>CB</sub> = -10 V    f = 100 KHz			100	<b>pF</b>