

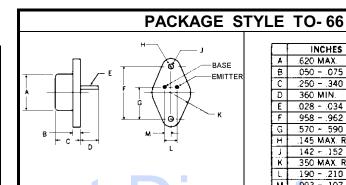
## SILICON PNP MEDIUM POWER TRANSISTOR

## **DESCRIPTION:**

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

## **MAXIMUM RATINGS**

Ic	4.0 A		
$V_{\text{CEO}}$	-60 V		
P <sub>DISS</sub>	$25 \text{ W } \text{ @ T}_{\text{C}} = 25 ^{\text{O}}\text{C}$		
TJ	-65 to +200 °C		
T <sub>STG</sub>	-65 to +200 °C		
θ <sub>JC</sub>	7 °C/W		



	INCHES	MILLIMETERS		
Α	.620 MAX.	15.75 MAX.		
₿	.050075	1.27 - 1.90		
O	.250340	6.35 - 8.63		
O	360 MIN.	9.14 MIN.		
Ε	.028 ~ .034 DIA.	.711863		
4	.958962	24.33 - 24.43		
O	.570 ~ .590	14.47 - 14.98		
I	.145 MAX. RAD.	3.68 MAX. RAD.		
_	142 + .152 DIA.	3.60 - 3.86 DIA		
K	.350 MAX. RAD.	8.89 MAX. RAD.		
L	.190210	4.82 - 5.33		
М	.093107	2.36 - 2.72		

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_CEO$	I <sub>C</sub> = 100 mA	-60			V
I <sub>CEX</sub>	$V_{CE} = -60 \text{ V}$ $V_{BE} = 1.5 \text{ V}$ $T_{C} = 150 \text{ °C}$	;		0.1 1	mA
I <sub>CB0</sub>	V <sub>CE</sub> = -60 V			100	μА
I <sub>CEO</sub>	V <sub>CE</sub> = -40 V			1.0	mA
I <sub>EBO</sub>	V <sub>EB</sub> = -7.0 V			500	nA
h <sub>FE</sub>	$V_{CE}$ = -1.0 V $I_{C}$ = 100 mA $I_{C}$ = 250 mA $I_{C}$ = 500 mA $I_{C}$ = 1.0 A	40 30 20 10		100	
$V_{\text{CE(SAT)}}$	I <sub>C</sub> = 1.0 A I <sub>B</sub> = 125 mA			-0.6	V
$V_{BE(ON)}$	$V_{CE} = -1.0 \text{ V}$ $I_{C} = 1.0 \text{ A}$			-1.0	V
h <sub>fe</sub>	V <sub>CE</sub> = -10 V I <sub>C</sub> = 50 mA f = 1.0 KHz	25			
f⊤	V <sub>CE</sub> = -10 V I <sub>C</sub> = 100 mA f = 1.0 MH:	z 3.0			MHz
Сов	V <sub>CB</sub> = -10 V f = 100 KH.	z		100	pF