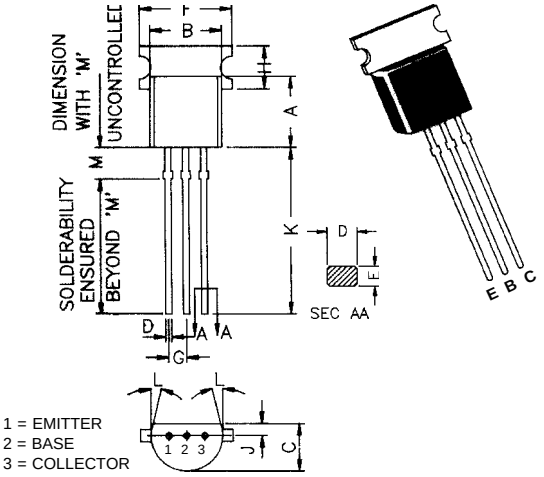
TO-237 Plastic Package

2N6714
2N6715
2N6716

NPN SILICON PLANAR EPITAXIAL TRANSISTORS

Designed for General purpose Medium Power Amplifier and Switching Circuits.



1 = EMITTER
2 = BASE
3 = COLLECTOR

ALL DIMENSIONS ARE IN M.M.

DIM	MIN	MAX
A	4,32	5,33
B	4,45	5,20
C	3,18	4,19
D	0,41	0,55
E	0,35	0,50
F	–	5,40
G	1,14	1,40
H	–	2,54
K	12,70	–
L	5 DEG	
J	1.14	1.53
M	1.982	2.082

ABSOLUTE MAXIMUM RATINGS

Rating	*Symbol*	**2N6714**	**2N6715**	**2N6716**	*Units*
Collector-Emitter Voltage	V_{CEO}	*30*	*40*	*60*	*V*
Collector-Base Voltage	V_{CBO}	*40*	*50*	*60*	*V*
Emitter-Base Voltage	V_{EBO}	-	*5.0*	-	*V*
Collector Current – Continuous	I_C	-	*1.5*	-	*A*
Power Dissipation @ Ta=25°C	P_D	-	*850*	-	*mW*
Operating And Storage Junction Temperature Range	T_j,T_{stg}		*-55 to +150*		*° C*

ELECTRICAL CHARACTERISTICS *(Ta =25°C unless otherwise specified)*

Description		Symbol	Min.	Max.	Unit
Collector Cutoff Current					
V_{CB}=40V, I_E=0	**2N6714**	I_{CBO}	-	100	nA
V_{CB}=50V, I_E=0	**2N6715**		-	100	nA
V_{CB}=40V, I_E=0	**2N6716**		-	100	nA
D.C. Current Gain					
I_C=10mA, V_{CE}=1V	**2N6714/6715**	h_{FE}	55	-	
I_C=100mA, V_{CE}=1V	**2N6714/6715**		60	-	
I_C=1A, V_{CE}=1V	**2N6714/6715**		50	250	
I_C=50mA, V_{CE}=1V	**2N6716**		80	-	
I_C=250mA, V_{CE}=1V	**2N6716**		50	250	
I_C=500mA, V_{CE}=1V	**2N6716**		20	-	
Collector-Emitter Saturation Voltage					
I_C=1A, I_B=100mA	**2N6714/6715**	$V_{CE(sat)}$	-	0.5	V
I_C=250mA, I_B=25mA	**2N6716**		-	0.35	V
Base Emitter on Voltage					
I_C=1A, V_{CE}=1V	**2N6714/6715**	$V_{BE(on)}$	-	1.2	V
DYNAMIC CHARACTERISTICS					
Output Capacitance					
V_{CB}=10V, I_E=0, f=1MHz	**ALL**	C_{ob}	-	20	pF
Current-Gain-Bandwidth Product					
I_C=50mA, V_{CE}=1V	**2N6714/6716**	f_T	50	500	MHz
	2N6715		50	400	MHz

Notes

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete 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).

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