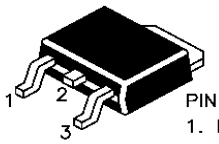
NPN SILICON PLANAR TRANSISTOR

CJD86

DPAK (TO-252)
Plastic Package



PIN CONFIGURATION
1. BASE
2. COLLECTOR
3. EMITTER

For High Speed Switching Application

ABSOLUTE MAXIMUM RATINGS (T_c=25ºC)

DESCRIPTION	SYMBOL	VALUE	UNITS
Collector Base Voltage	V_{CBO}	60	V
Collector Emitter Voltage	V_{CEO}	50	V
Emitter Base Voltage	V_{EBO}	6.0	V
Collector Current	I_C	3.0	A
Peak Collector Current	I_{CP}	6.0	A
Power Dissipation	P_D	0.5	W
Mounted on Ceramic Board (250mm^2 X 8.0 mm)		1.5	W
Junction Temperature	T_j	150	ºC
Storage Temperature Range	T_{stg}	- 55 to +150	ºC

***These ratings are applicable when surface mounted on the minimum pad sizes recommended. (see page no 3)**

ELECTRICAL CHARACTERISTICS (T_c=25ºC unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNITS
Collector Emitter Voltage	V_{CEO}	I_C=1mA, I_B=0	50			V
Collector Base Voltage	V_{CBO}	I_C=10µA, V_{CE}=2V	60			V
Emitter Base Voltage	V_{EBO}	I_E=10µA, I_C=0	6.0			V
Collector Cut Off Current	I_{CBO}	V_{CB} =40V, I_E=0			1.0	µA
Emitter Cut Off Current	I_{EBO}	V_{EB}=4V, I_C = 0			1.0	µA
DC Current Gain	*h_{FE}	**I_C=100mA, V_{CE}=2V	100		560	
		I_C =3A, V_{CE}=2V	35			

DYNAMIC CHARACTERISTICS

Transition Frequency	f_T	V_{CE}=10V, I_C=50mA		150		MHz
Output Capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz		25		pF

**h_{FE} Classifications	R : 100 - 200, S : 140 - 280, T : 200 - 400, U : 280 - 560	

MARKING	CDIL MJD86R	CDIL MJD86S	CDIL MJD86T	CDIL MJD86U	CDIL MJD86
	XY MX	XY MX	XY MX	XY MX	XY MX
XY= Date Code					

****Pulse Test: Pulse Width ≤ 300µs, Duty Cycle ≤ 2%**

CJD86Rev100605E

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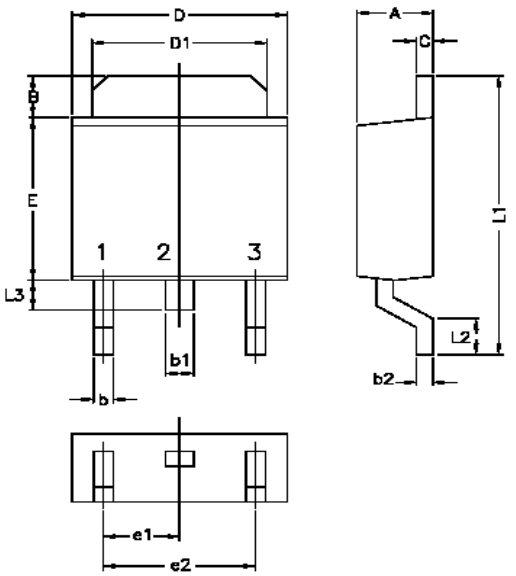
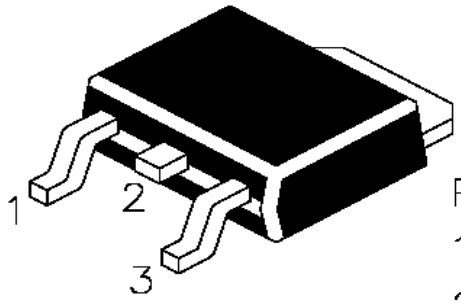
DPAK PACKAGE OUTLINE DIMENSIONS



DIM	MIN.	MAX.
A	2.20	2.40
B	1.30	1.50
b	0.55	0.65
b1	0.75	0.85
b2	0.46	0.56
C	0.46	0.56
D	6.40	6.60
D1	5.20	5.40
E	5.40	5.60
e1	2.25	2.35
e2	4.50	4.70
L1	9.25	9.75
L2	0.5	—
L3	0.90	1.10

ALL DIMENSIONS ARE IN mm



PIN CONFIGURATION

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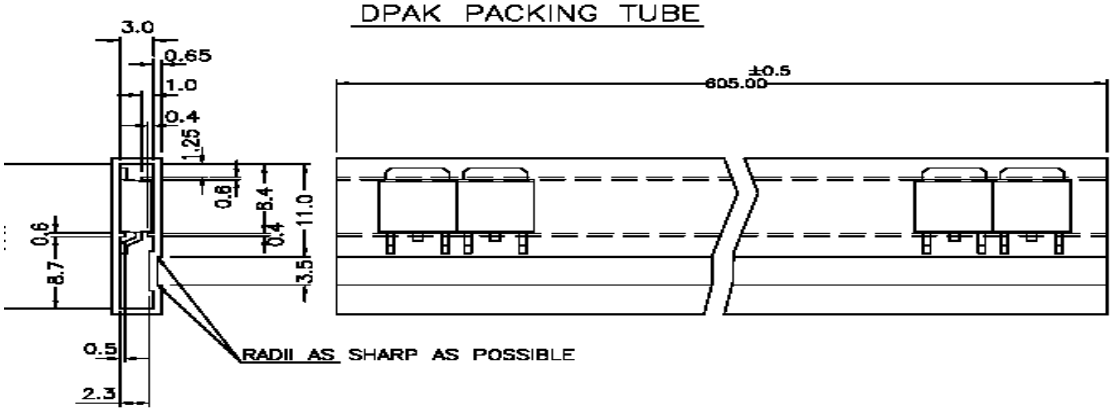
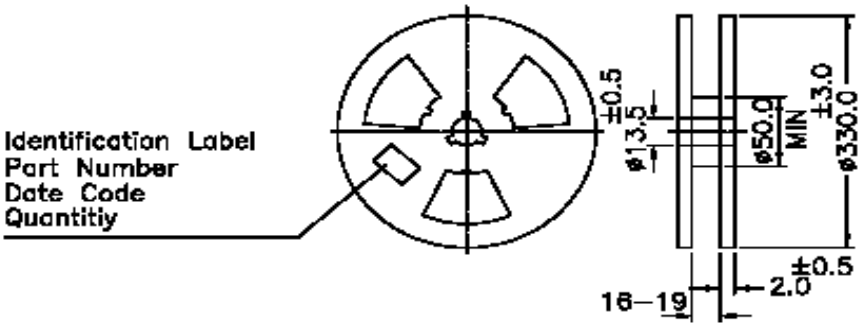
DPAK PACKING TUBE



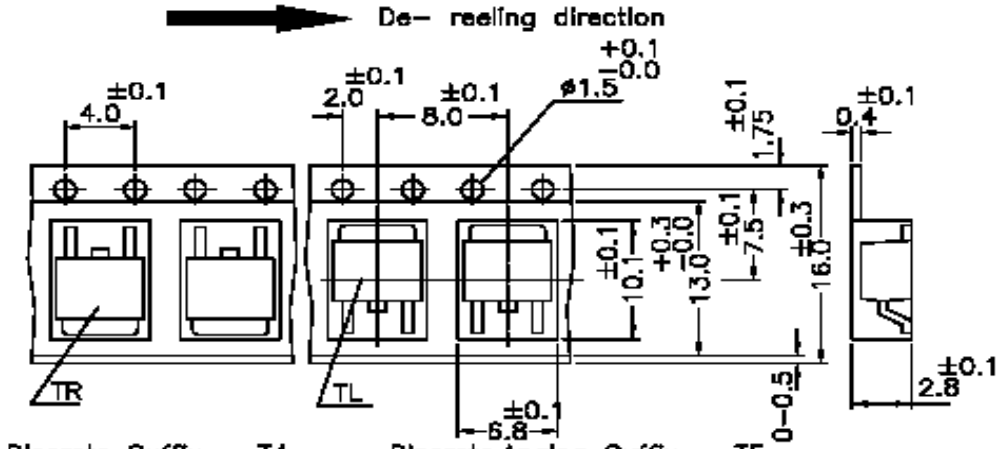
NOTE:—
80 Pcs/TUBE
ALL DIMENSIONS ARE IN mm

DPAK TAPE & REEL SPECIFICATION



ALL DIMENSIONS ARE IN mm
REEL ø 330 mm (13")
No of Device 2500

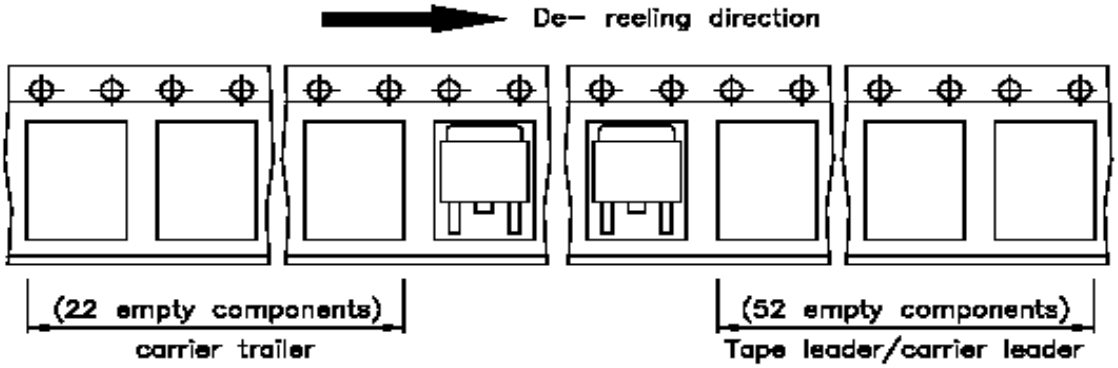
TAPE & REEL



Discrete Suffix – T4
Analog Suffix – RK

Discrete,Analog Suffix – T5

Notes:–
A maximum of three consecutive components may be missing. Provided this gap is followed by six consecutive components.



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Disclaimer

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