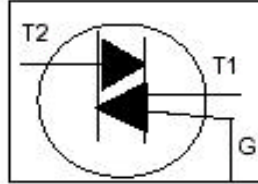
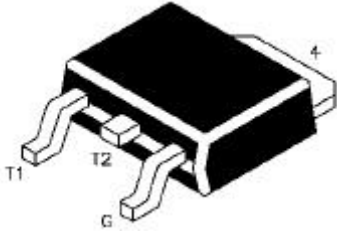


TRIAC

CJD136

**DPAK (TO-252)
Plastic Package**



For use in high bidirectional transient and blocking voltage applications, and for high thermal cycling performance. Typical Applications include Motor Control, Industrial and Domestic Lighting, Heating and Static Switching.

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	TEST CONDITION	VALUE	UNIT
Repetitive Peak Off State Voltage	$*V_{DRM}$		600	V
RMS on State Current	$I_T (RMS)$	full sine wave, $T_{mb} \leq 107^\circ C$	4.0	A
Non Repetitive Peak on State Current	I_{TSM}	full sine wave, $T_j = 25^\circ C$ prior to $t = 20ms$ $t = 16.7ms$	25 27	A A
I^2t for Fusing	I^2t	$t = 10ms$	3.1	A^2s
Repetitive Rate of Rise of on State Current After Triggering	di_T/dt	$I_{TM} = 6A, I_G = 0.2A, di_G/dt = 0.2A/\mu s$ T2+ G+ T2+ G- T2- G- T2- G+	50 50 50 10	$A/\mu s$ $A/\mu s$ $A/\mu s$ $A/\mu s$
Peak Gate Current	I_{GM}		2.0	A
Peak Gate Voltage	V_{GM}		5.0	V
Peak Gate Power	P_{GM}		5.0	W
Average Gate Power	$P_{G(AV)}$	Over any 20ms period	0.5	W
Storage Temperature	T_{stg}		- 40 to +150	$^\circ C$
Operating Junction Temperature	T_j		125	$^\circ C$

*The rate of rise of current should not exceed 3A/ms

THERMAL RESISTANCE

Junction to Mounting Base	$R_{th(j-mb)}$	full cycle	3.0 max	K/W
		half cycle	3.7 max	K/W
Junction to Ambient (typical)	$R_{th(j-a)}$	in free air	60 typ	K/W

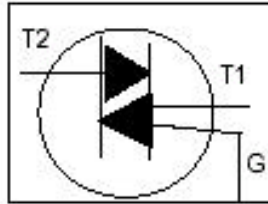
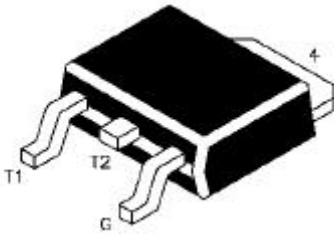
ELECTRICAL CHARACTERISTICS ($T_j = 25^\circ C$ unless specified otherwise)

PARAMETER	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Gate Trigger Current	I_{GT}	$V_D = 12V, I_T = 0.1A$ T2+ G+ T2+ G- T2- G- T2- G+		35	mA
				35	mA
				35	mA
				70	mA

MARKING

XY= Date Code

CDIL
CJD136
MX XY



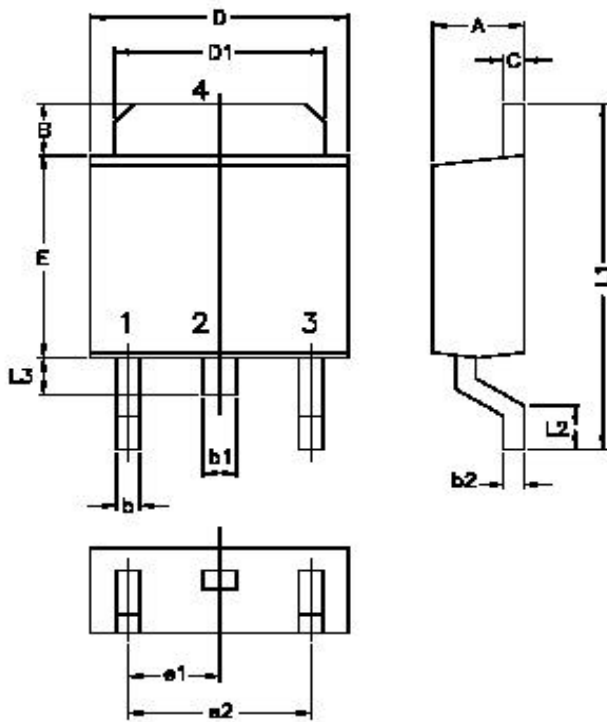
ELECTRICAL CHARACTERISTICS (T_J=25°C unless specified otherwise)

PARAMETER	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Latching Current	I _L	V _D =12V, I _{GT} =0.1A			
		T2+ G+		20	mA
		T2+ G-		30	mA
		T2- G-		20	mA
		T2- G+		30	mA
Holding Current	I _H	V _D =12V, I _{GT} =0.1A		15	mA
On State Voltage	V _T	I _T =5A		1.7	V
Gate Trigger Voltage	V _{GT}	V _D =12V, I _T =0.1A		1.5	V
		V _D =400V, I _T =0.1A, T _J =125°C	0.25		V
Off State Leakage Current	I _D	V _D =max, V _{DRM} =max, T _J =125°C		0.5	mA

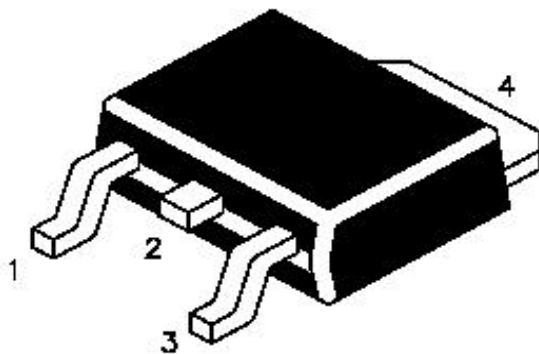
DYNAMIC CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Critical Rate of Rise of off State Voltage	dV _D /dt	V _{DM} =67% V _{DRM} =max, T _J =125°C, exponential waveform, gate open circuit	100			V/μs
Critical Rate of Change of Commutating Voltage	dV _{com} /dt	V _{DM} =400V, T _J =95°C, I _{T(RMS)} =4A, d _{com} /dt=1.8A/ms, gate open circuit		50		V/μs
Gate Controlled turn on time	t _{gt}	I _{TM} =6A, V _D =V _{DRM} max, I _G =0.1A, dI _G /dt=5A/μs		2.0		μs

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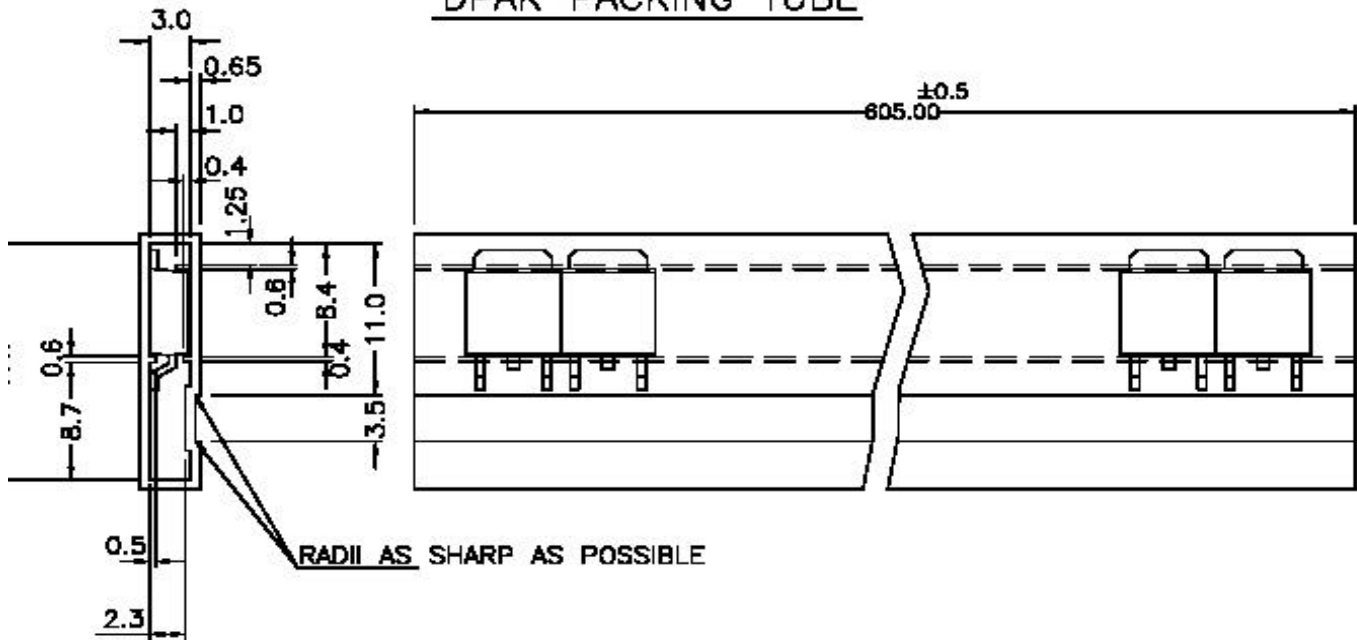
DIM	MIN.	MAX.
A	2.20	2.40
B	1.30	1.50
b	0.55	0.65
b1	0.75	0.85
b2	0.46	0.58
C	0.46	0.58
D	6.40	6.60
D1	5.20	5.40
E	5.40	5.60
e1	2.25	2.35
e2	4.50	4.70
L1	9.25	9.75
L2	0.5	—
L3	0.90	1.10



PIN CONFIGURATION

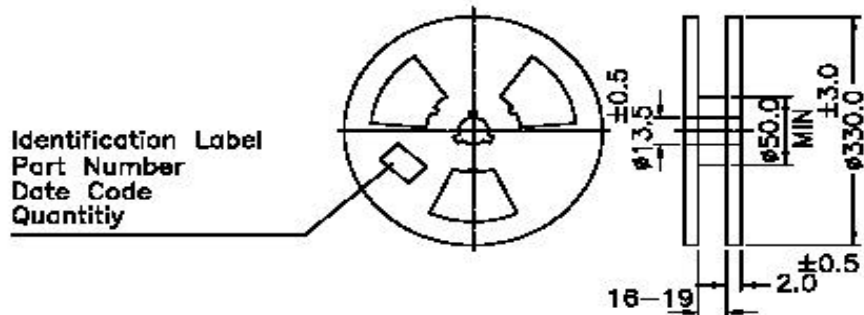
1. T1 MAIN TERMINAL 1
2. T2 MAIN TERMINAL 2
3. G GATE
4. FIN (T2)

DPAK PACKING TUBE



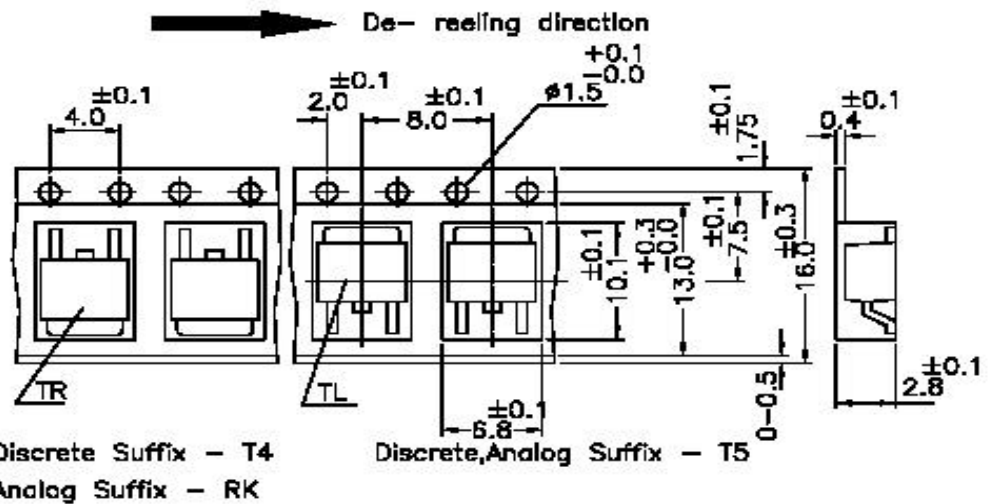
NOTE:-
80 Pcs/TUBE
ALL DIMENSIONS ARE IN mm

DPAK TAPE & REEL SPECIFICATION



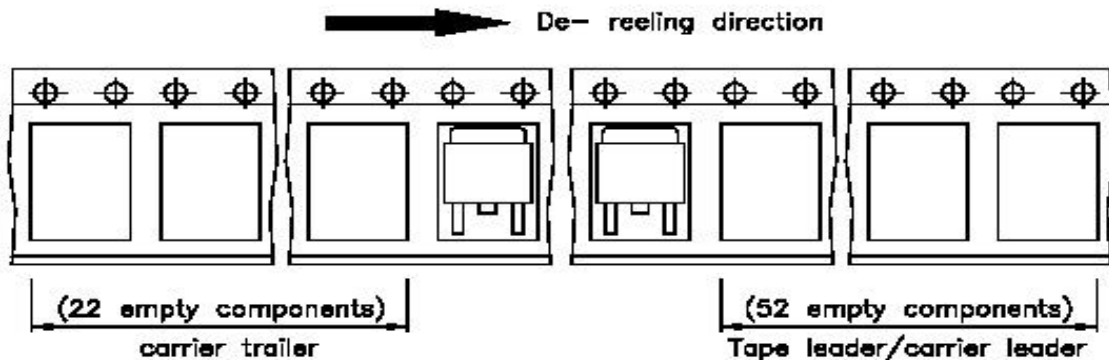
ALL DIMENSIONS ARE IN mm
REEL ϕ 330 mm (13")
No of Device 2500

TAPE & REEL



Notes:-

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



Disclaimer

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