

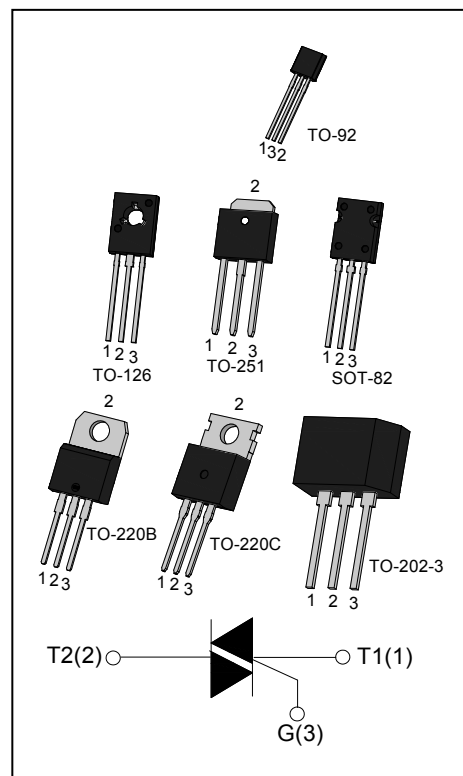


DESCRIPTION:

JST134 series triacs with low holding and latching current are especially recommended for use on middle and small resistance type power load. All the packages mentioned are RoHS compliant. (2011/65/EU)

MAIN FEATURES

Symbol	Value	Unit
$I_{T(RMS)}$	4	A
V_{DRM}/V_{RRM}	600/800	V



ABSOLUTE MAXIMUM RATINGS

Parameter		Symbol	Value	Unit
Storage junction temperature range		T_{stg}	-40 - 150	°C
Operating junction temperature range		T_j	-40 - 125	°C
Repetitive peak off-state voltage($T_j=25^\circ\text{C}$)		V_{DRM}	600/800	V
Repetitive peak reverse voltage($T_j=25^\circ\text{C}$)		V_{RRM}	600/800	V
Non repetitive surge peak Off-state voltage		V_{DSM}	$V_{DRM} + 100$	V
Non repetitive peak reverse voltage		V_{RSM}	$V_{RRM} + 100$	V
RMS on-state current	TO-251 ($T_c=100^\circ\text{C}$)	$I_{T(RMS)}$	4	A
	TO-220B(Non-Ins)/ TO-220C($T_c=103^\circ\text{C}$)			
	TO-202-3 ($T_c=95^\circ\text{C}$)			
	SOT-82 /TO-126 ($T_c=97^\circ\text{C}$)			
	TO-92 ($T_c=50^\circ\text{C}$)			

Non repetitive surge peak on-state current (full cycle, F=50Hz)	I_{TSM}	25	A
I^2t value for fusing ($t_p = 10ms$)	I^2t	3.1	A^2s
Critical rate of rise of on-state current ($I_G = 2 \times I_{GT}$)	I - II - III	50	$A/\mu s$
	IV	10	
Peak gate current	I_{GM}	2	A
Average gate power dissipation	$P_{G(AV)}$	0.5	W
Peak gate power	P_{GM}	5	W
Peak pulse voltage ($T_j = 25^\circ C$; non-repetitive, off-state; FIG.9)	V_{PP}	2.5	kV

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

Symbol	Test Condition	Quadrant		Value			Unit
				T	D	E	
I_{GT}	$V_D = 12V$ $R_L = 33\Omega$	I - II - III	MAX	5	5	10	mA
		IV		5	10	25	
V_{GT}		ALL	MAX	1.3			V
V_{GD}	$V_D = V_{DRM}$ $T_j = 125^\circ C$ $R_L = 3.3K\Omega$	ALL	MIN	0.2			V
I_L	$I_G = 1.2I_{GT}$	I - III - IV	MAX	8	10	20	mA
		II		12	15	35	
I_H	$I_T = 100mA$		MAX	5	10	20	mA
dV/dt	$V_D = 2/3V_{DRM}$ Gate Open $T_j = 125^\circ C$		MIN	20	50	100	$V/\mu s$
$(dV/dt)_c$	$(dI/dt)_c = 1.1A/ms$ $T_j = 125^\circ C$		MIN	0.5	1	5	$V/\mu s$

STATIC CHARACTERISTICS

Symbol	Parameter		Value(MAX)	Unit
V_{TM}	$I_{TM} = 5A$ $t_p = 380\mu s$	$T_j = 25^\circ C$	1.7	V
I_{DRM}	$V_D = V_{DRM}$ $V_R = V_{RRM}$	$T_j = 25^\circ C$	5	μA
I_{RRM}		$T_j = 125^\circ C$	0.5	mA

THERMAL RESISTANCES

Symbol	Parameter	Value	Unit	
$R_{th(j-c)}$	junction to case(AC)	TO-251	3.7	°C/W
		TO-220B(Non-Ins)/ TO-220C	3.1	
		TO-202-3	4.5	
		SOT-82/TO-126	4.1	
		TO-92	11.2	

ORDERING INFORMATION

<p>JieJie Microelectronics Co.,Ltd</p>	<p>J</p> <p>TRIACs</p> <p>$I_{T(RMS)}:4A$</p> <p>C:TO-220C S3:TO-202-3 B:TO-220B(Non-Ins) U:TO-92 QP:SOT-82 Q:TO-126 H:TO-251</p>	<p>ST</p>	<p>134</p>	<p>B</p>	<p>-600</p> <p>600:$V_{DRM}/V_{RRM} \geq 600V$ 800:$V_{DRM}/V_{RRM} \geq 800V$</p>	<p>D</p> <p>T:$I_{GT1-3} \leq 5mA$ $I_{GT4} \leq 5mA$ D:$I_{GT1-3} \leq 5mA$ $I_{GT4} \leq 10mA$ E:$I_{GT1-3} \leq 10mA$ $I_{GT4} \leq 25mA$</p>	<p>-/</p> <p>Blank: tube</p>
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MARKING

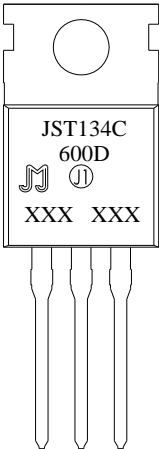
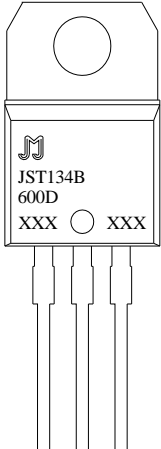
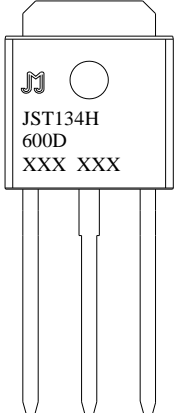
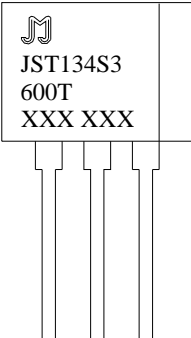
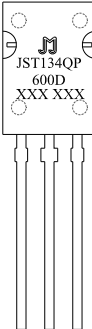
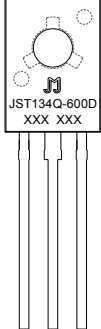
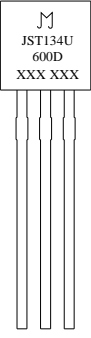
 <p>JST134C 600D M ① XXX XXX</p>	 <p>JST134B 600D XXX ○ XXX</p>	 <p>JST134H 600D XXX XXX</p>
 <p>JST134S3 600T XXX XXX</p>	 <p>JST134QP 600D XXX XXX</p>	 <p>JST134Q-600D XXX XXX</p>
 <p>JST134U 600D XXX XXX</p>	<p style="text-align: center;"><u>XXX XXX</u></p> <p style="text-align: center;"> Year ———— Month ———— Production Code </p>	

FIG.1: Maximum power dissipation versus RMS on-state current

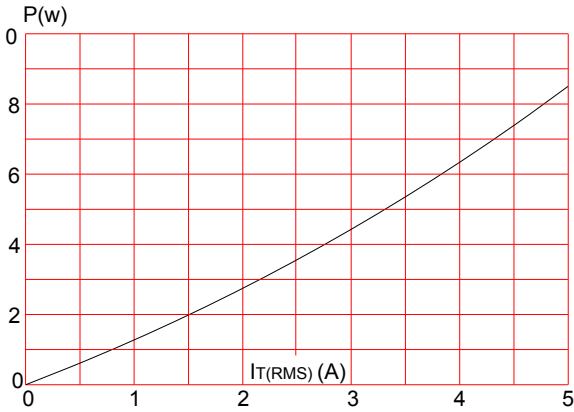


FIG.3: Surge peak on-state current versus number of cycles

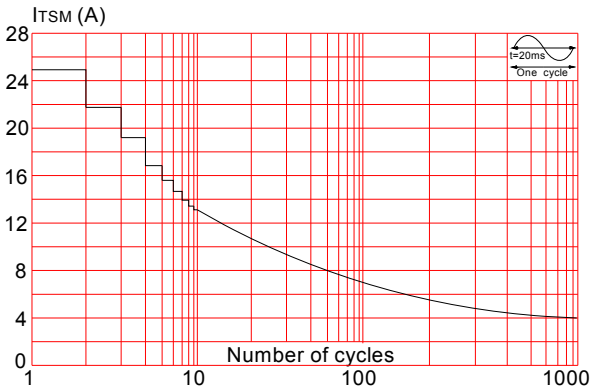


FIG.5: Non-repetitive surge peak on-state current for a sinusoidal pulse with width $t_p < 20\text{ms}$ and corresponding value of I^2t (I - II -III: $dI/dt < 50\text{A}/\mu\text{s}$; IV: $dI/dt < 10\text{A}/\mu\text{s}$)

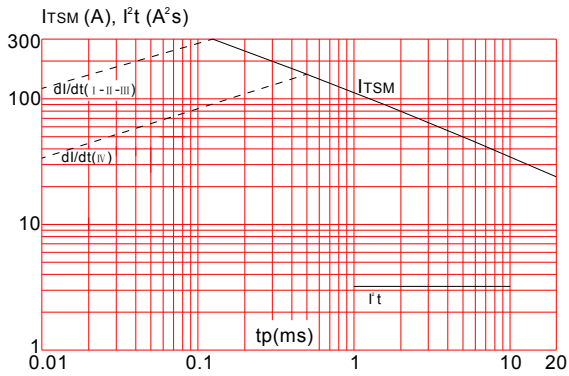


FIG.2: RMS on-state current versus case temperature

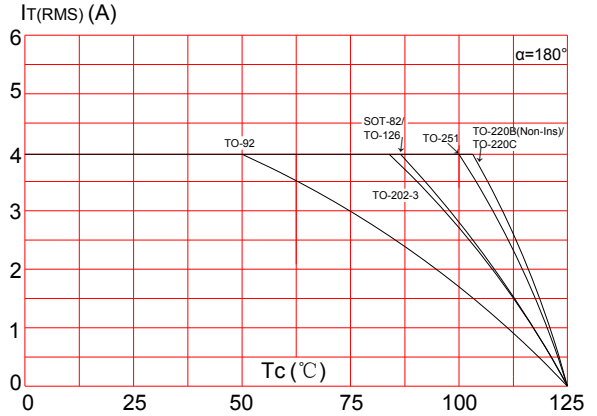


FIG.4: On-state characteristics (maximum values)

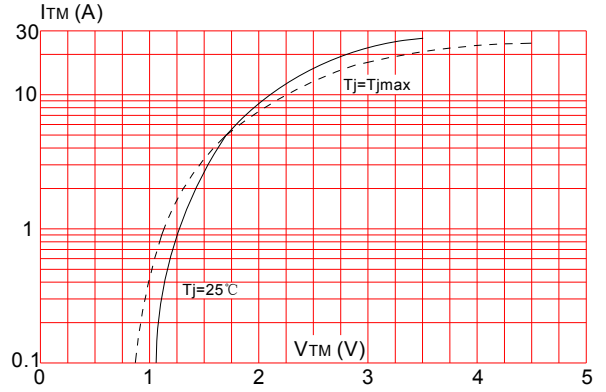


FIG.6: Relative variations of gate trigger current versus junction temperature

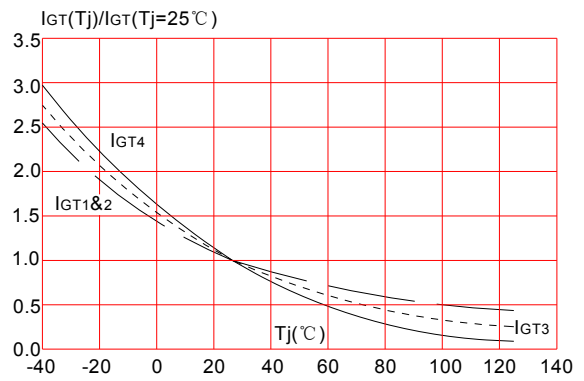


FIG.7: Relative variations of holding current versus junction temperature

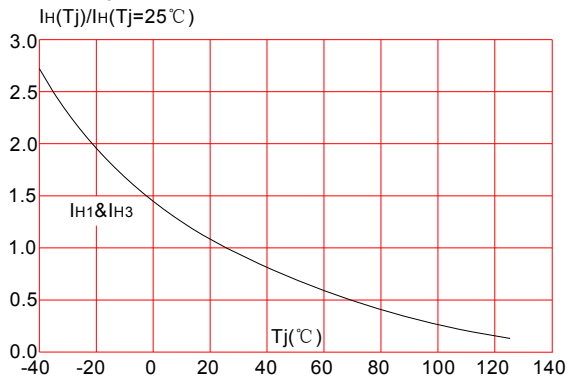


FIG.8: Relative variations of latching current versus junction temperature

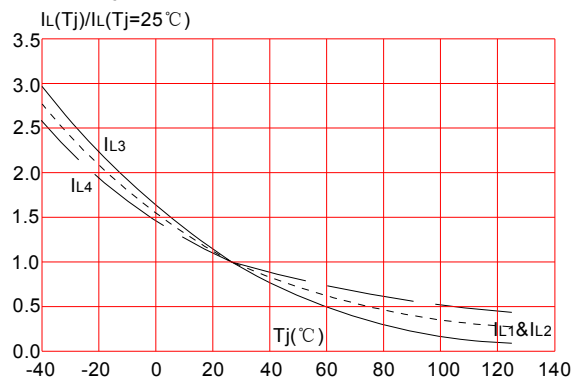
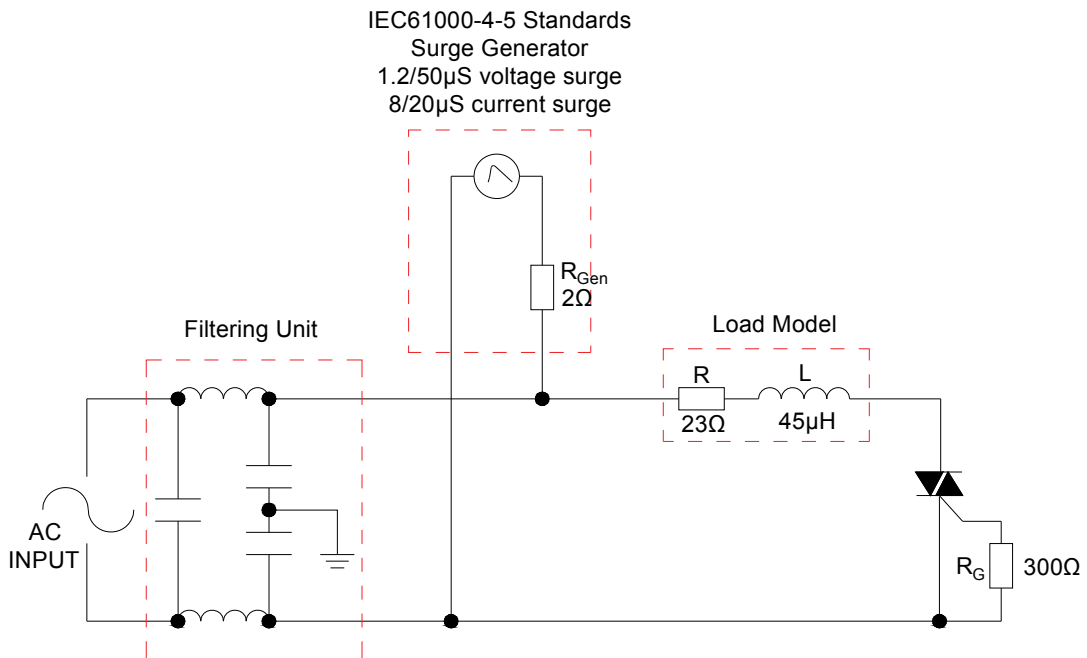


FIG.9: Test circuit for inductive and resistive loads to IEC-61000-4-5 standards.



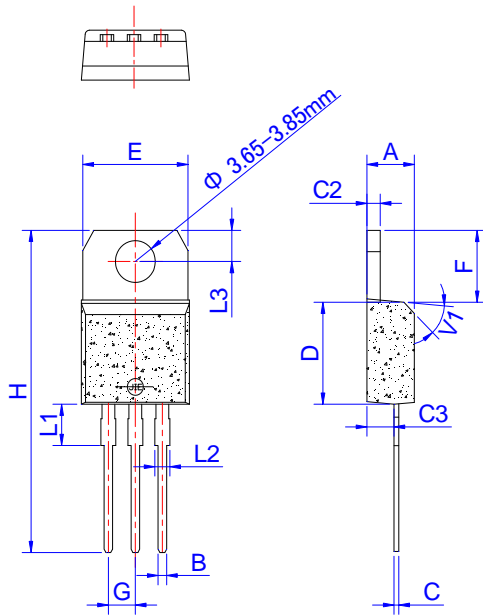
ORDERING INFORMATION

Order code	Voltage V _{DRM} /V _{RRM} (V)	IGT(mA)		Package	Base qty. (pcs)	Delivery mode
		I - II-III	IV			
JST134B-600/800T	600/800	5	5	TO-220B (Non-Ins)	50	Tube
JST134B-600/800D		5	10			
JST134B-600/800E		10	25			
JST134C-600/800T		5	5	TO-220C		
JST134C-600/800D		5	10			
JST134C-600/800E		10	25			
JST134H-600/800T		5	5	TO-251	80	
JST134H-600/800D		5	10			
JST134H-600/800E		10	25			
JST134S3-600/800T		5	5	TO-202-3	250	Bulk Pack
JST134S3-600/800D		5	10			
JST134S3-600/800E		10	25			
JST134Q-600/800T		5	5	TO-126	500	
JST134Q-600/800D		5	10			
JST134Q-600/800E		10	25			
JST134U-600/800T		5	5	TO-92	1,000	
JST134U-600/800D		5	10			
JST134U-600/800E		10	25			

Document Revision History

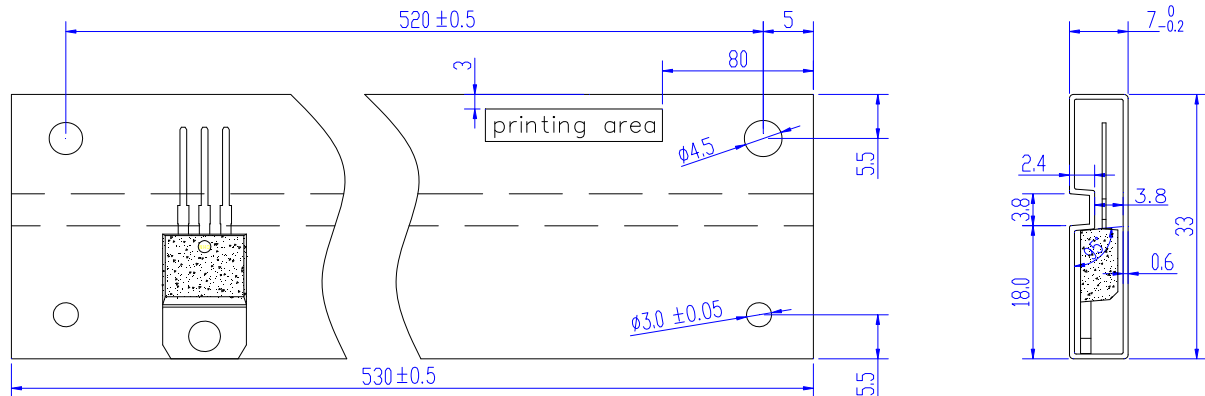
Date	Revision	Changes
May 25, 2019	13	Last update
Sep 8, 2021	14	Add V _{PP} Value

PACKAGE MECHANICAL DATA



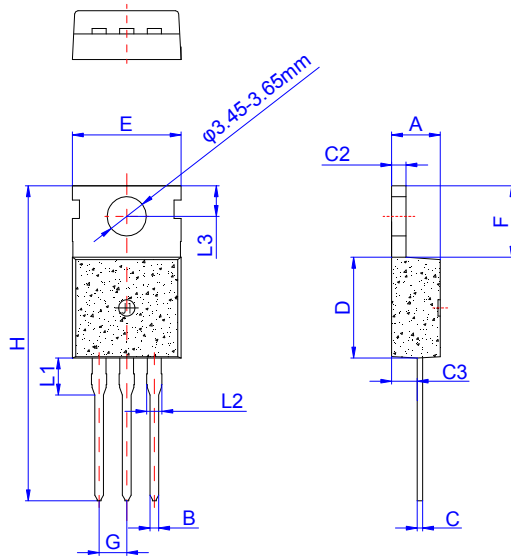
Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.60	0.173		0.181
B	0.61		0.88	0.024		0.035
C	0.46		0.70	0.018		0.028
C2	1.21		1.32	0.048		0.052
C3	2.40		2.72	0.094		0.107
D	8.60		9.70	0.339		0.382
E	9.60		10.4	0.378		0.409
F	6.20		6.60	0.244		0.260
G	2.40		2.70	0.094		0.106
H	28.0		29.8	1.102		1.173
L1		3.75			0.147	
L2	1.14		1.70	0.045		0.067
L3	2.65		2.95	0.104		0.116
V1		45°			45°	

DELIVERY MODE



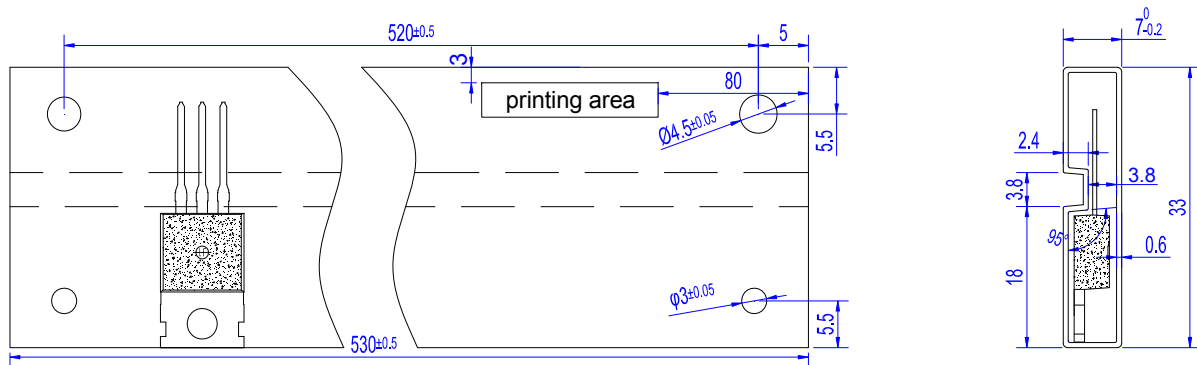
PACKAGE	OUTLINE	TUBE (PCS)	INNER BOX (PCS)	PER CARTON
TO-220B	TUBE	50	1,000	5,000

PACKAGE MECHANICAL DATA



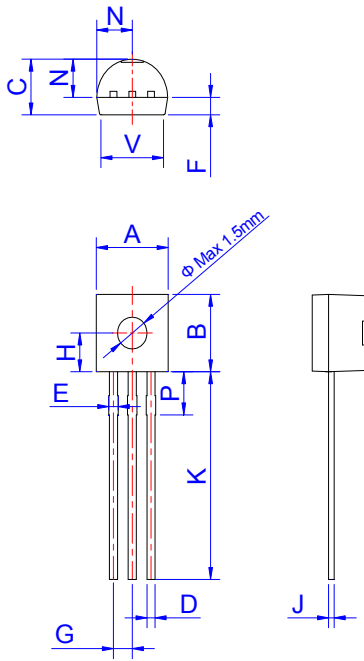
Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.40		4.60	0.173		0.181
B	0.70		0.90	0.028		0.035
C	0.45		0.60	0.018		0.024
C2	1.23		1.32	0.048		0.052
C3	2.20		2.60	0.087		0.102
D	8.90		9.90	0.350		0.390
E	9.90		10.3	0.390		0.406
F	6.30		6.90	0.248		0.272
G		2.54			0.1	
H	28.0		29.8	1.102		1.173
L1		3.39			0.133	
L2	1.14		1.70	0.045		0.067
L3	2.65		2.95	0.104		0.116

DELIVERY MODE



PACKAGE	OUTLINE	TUBE (PCS)	INNER BOX (PCS)	PER CARTON
TO-220C	TUBE	50	1,000	5,000

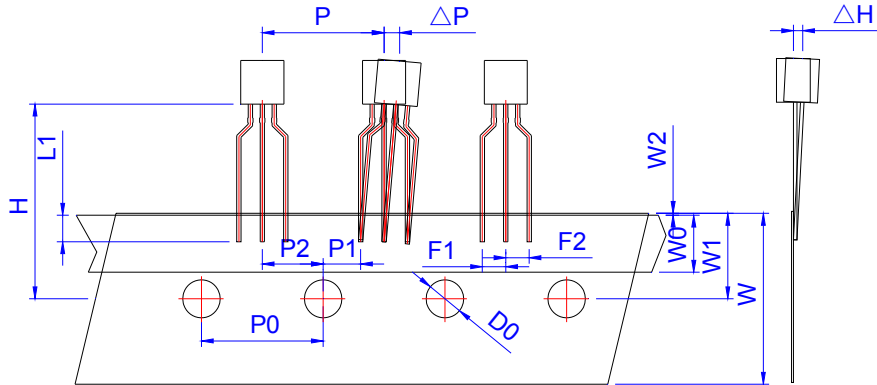
PACKAGE MECHANICAL DATA



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	4.45		5.20	0.175		0.205
B	4.32		5.33	0.170		0.210
C	3.18		4.19	0.125		0.165
D	0.407		0.533	0.016		0.021
E	0.50		0.70	0.020		0.028
F	-	1.1	-	-	0.043	-
G	-	1.27	-	-	0.050	-
H	-	2.30	-	-	0.091	-
J	0.36		0.50	0.014		0.020
K	12.70		15.0	0.500		0.591
N	2.04		2.66	0.080		0.105
P	1.86		2.06	0.073		0.081
V	-		4.3	-		0.169

DELIVERY MODE

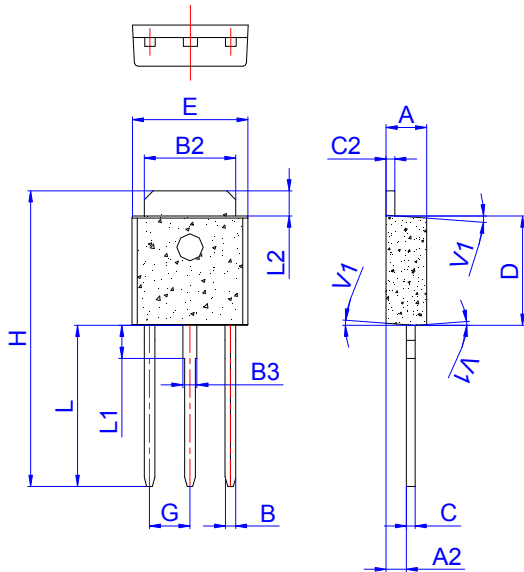
PACKAGE	OUTLINE	BAG (PCS)	INNER BOX (PCS)	CARTON BOX (PCS)
TO-92	Bulk Pack	1,000	10,000	50,000



Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
P	12.40	12.70	13.00	0.488	0.500	0.512
P0	12.40	12.70	13.00	0.488	0.500	0.512
P1	3.55	3.85	4.15	0.140	0.152	0.163
P2	6.05	6.35	6.65	0.238	0.250	0.262
ΔP	-1.0	0	1.0	-0.039	0	0.039
F1、F2	2.20	2.50	2.80	0.087	0.098	0.110
F1-F2	-0.3	0	0.3	-0.012	0	0.012
W	17.50	18.00	19.00	0.689	0.709	0.748
W0	5.50	6.00	6.50	0.217	0.236	0.256
W1	8.50	9.00	9.50	0.335	0.354	0.374
W2			1.0			0.039
D0	3.80	4.0	4.20	0.150	0.157	0.165
ΔH	-1.0	0	1.0	-0.039	0	0.039
L1	2.5			0.098		
H	18.0	19.0	20.0	0.709	0.748	0.787

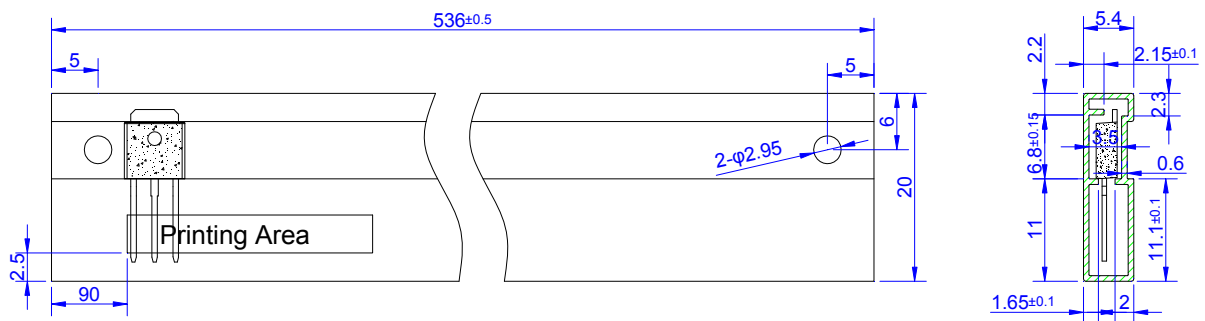
PACKAGE	OUTLINE	REEL (PCS)	INNER BOX (PCS)	CARTON BOX (PCS)
TO-92	Tape & Reel	/	2,000	20,000

PACKAGE MECHANICAL DATA



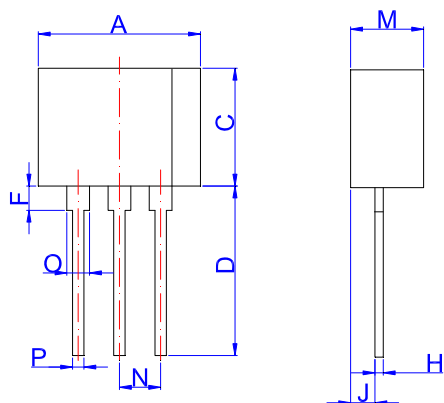
Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	2.20		2.40	0.086		0.095
A2	0.90		1.20	0.035		0.047
B	0.55		0.65	0.022		0.026
B2	5.10		5.40	0.200		0.213
B3	0.76		0.85	0.030		0.033
C	0.45		0.62	0.018		0.024
C2	0.48		0.62	0.019		0.024
D	6.00		6.20	0.236		0.244
E	6.40		6.70	0.252		0.264
G		2.30			0.091	
H	16.0		17.0	0.630		0.669
L	8.90		9.40	0.350		0.370
L1	1.80		1.90	0.071		0.075
L2	1.37		1.50	0.054		0.059
V1		4°			4°	

DELIVERY MODE



PACKAGE	OUTLINE	TUBE (PCS)	INNER BOX (PCS)	PER CARTON
TO-251	TUBE	80	4,000	20,000

PACKAGE MECHANICAL DATA



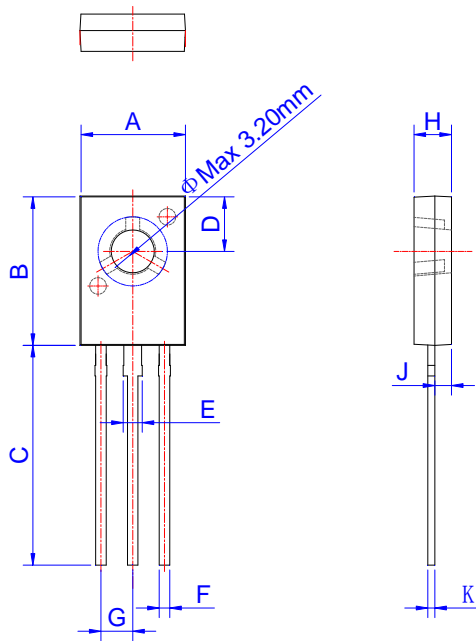
TO-202-3

Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	9.30		9.90	0.366		0.390
C	7.0		7.6	0.276		0.299
D	10.5		11.5	0.413		0.453
F	1.50		2.50	0.059		0.098
H	0.45		0.55	0.018		0.022
J	1.50		1.90	0.059		0.075
M	4.40		4.70	0.173		0.185
N		2.54			0.100	
O	1.20		1.50	0.047		0.059
P	0.60		0.80	0.024		0.031

DELIVERY MODE

PACKAGE	OUTLINE	BAG (PCS)	INNER BOX (PCS)	PER CARTON
TO-202-3	Bulk Pack	250	4,000	20,000

PACKAGE MECHANICAL DATA




Ref.	Dimensions					
	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A	7.40		7.80	0.291		0.307
B	10.6		11.2	0.417		0.441
C	15.3		16.3	0.602		0.642
D	3.90		4.10	0.154		0.161
E	1.17		1.47	0.046		0.058
F	0.66		0.86	0.026		0.034
G		2.29			0.090	
H	2.50		2.90	0.098		0.114
J	1.10		1.50	0.043		0.059
K	0.45		0.60	0.018		0.024

DELIVERY MODE

PACKAGE	OUTLINE	BAG (PCS)	INNER BOX (PCS)	CARTON BOX (PCS)
TO-126	Bulk Pack	500	2,000	10,000



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