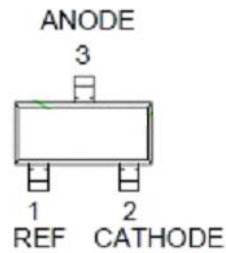




GM432

SOT-23



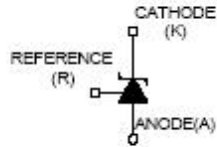
TO-92

1. REFERENCE
2. ANODE
3. CATHODE



■ DESCRIPTION & SYMBOL 功能和符號

輸出電壓從基準電壓到 18 伏可調的穩壓二極管



■ MAXIMUM RATINGS 最大額定值

Characteristic 特性參數	Symbol 符號	Rating 額定值	Unit 單位
Cathode to Anode Voltage 陰極到陽極電壓	V_{KA}	18	V
Cathode Current Range(Continuous) 流過陰極電流(連續)	I_{KA}	100	mA
Reference Input Current Range 基準電流	I_{ref}	3	mA
Power Dissipation 耗散功率	PD	225	mW
Operating Temperature 工作溫度	T_{ope}	-20 ~ + 80	°C
Operating Junction Temperature 工作結溫	T_j	-40 ~ + 150	°C
Storage Temperature 儲存溫度	T_{stg}	-40 ~ +150	°C

GM432

■ELECTRICAL CHARACTERISTICS 電特性

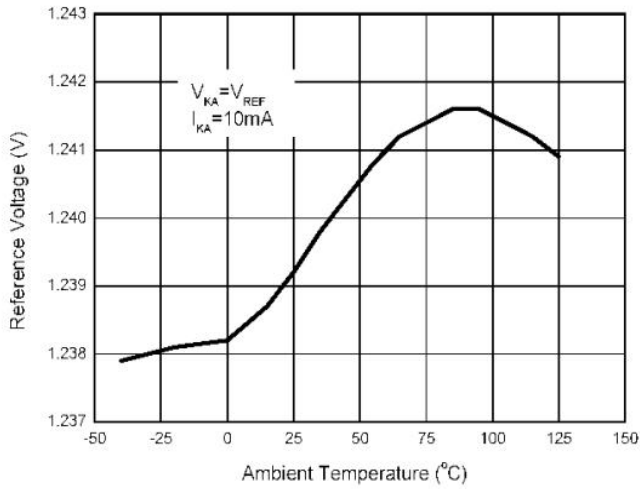
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如無特殊說明，溫度為 25°C)

Characteristic 特性參數	Symbol 符號	Test Condition 測試條件	Min 最小值	Typ 典型值	Max 最大值	Unit 單位
Reference Input Voltage 基準電壓精度	V_{REF} 0.5% 1% 2%	$V_{KA}=V_{REF}$, $I_{KA}=10\text{mA}$	1.234 1.227 1.215	1.240 1.240 1.240	1.246 1.253 1.265	V
Deviation of reference Input Voltage Over temperature 标准温度内基准電壓偏差	$\Delta V_{REF}/\Delta T$	$V_{KA}=V_{REF}$, $I_{KA}=10\text{mA}$ -20 ~ 80 $^{\circ}\text{C}$	—	10	25	mV
Ratio of Change in Reference Input Voltage to the Change in Cathode Voltage 陰極電壓与基准電壓变化比	$\Delta V_{REF}/\Delta V_{KA}$	$I_{KA}=10\text{mA}$ $\Delta V_{KA}=18\text{V}\sim V_{REF}$	—	-1.0	-2.7	mV/V
Reference Input Current 基準電流	I_{REF}	$I_{KA}=10\text{mA}$ $R1=10\text{k}\Omega, R2=\infty$	—	0.25	0.5	μA
Deviation of Reference Input Current Over Full Temperature Range 标准温度内基准電流偏差	$\Delta I_{REF}/\Delta T$	$I_{KA}=10\text{mA}$ $R1=10\text{k}\Omega, R2=\infty$ $T_A=\text{Full}$ Temperature	—	0.05	0.3	μA
Minimum Cathode Current for Regulation 最小陰極電流	$I_{KA}(\text{MIN})$	$V_{KA}=V_{REF}$	—	60	80	μA
Off-state Cathode Current 关闭状态陰極電流	$I_{KA}(\text{OFF})$	$V_{KA}=18\text{V}$ $V_{REF}=0\text{V}$	—	0.04	0.5	μA
Dynamic Impedance 輸出阻抗	Z_{KA}	$V_{KA}=V_{REF}$ $I_{KA}=1$ to 100mA $f\leq 1\text{kHz}$	—	0.2	0.4	Ω

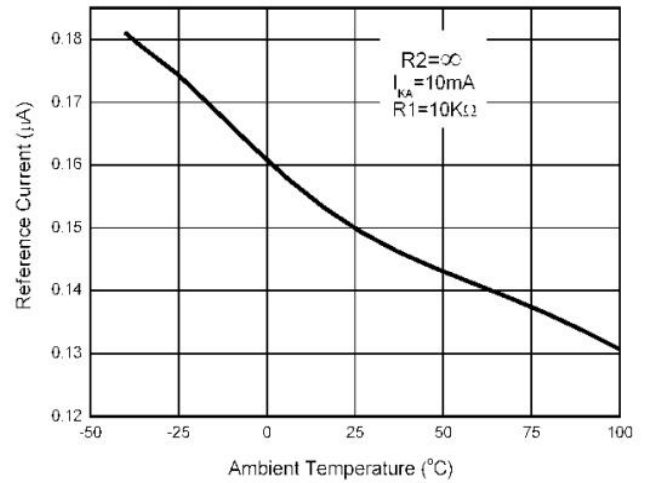
GM432

■ TYPICAL CHARACTERISTIC CURVE

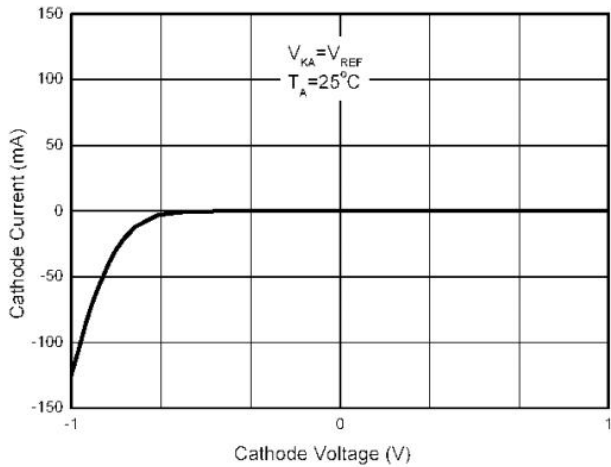
典型特性曲线



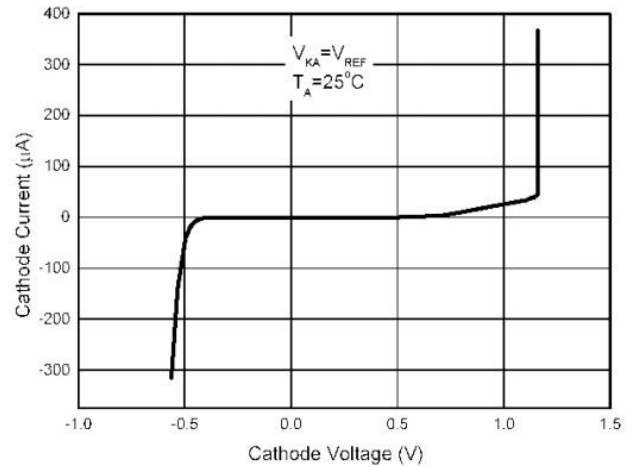
基準電壓與環境溫度



基準電流與環境溫度

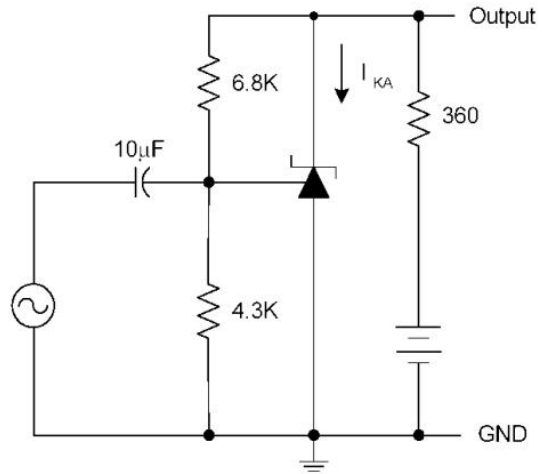
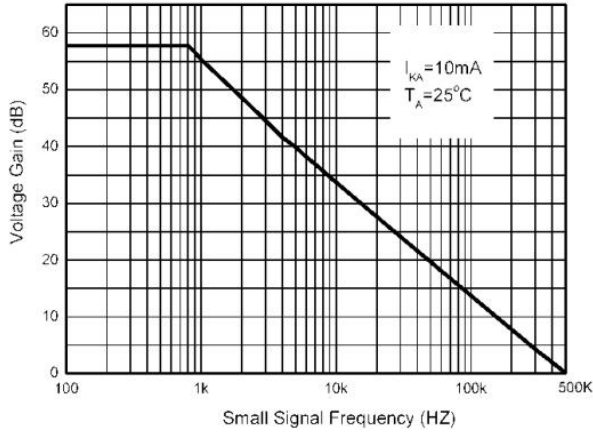


陰極電流與陰極電壓

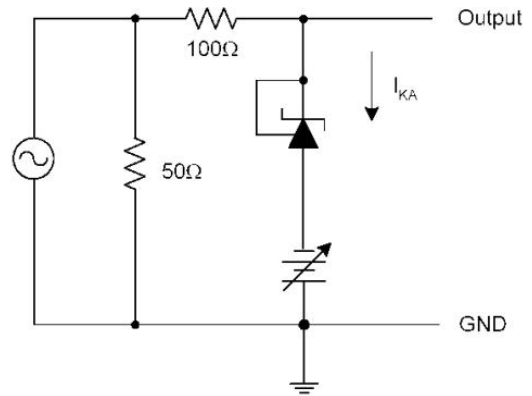
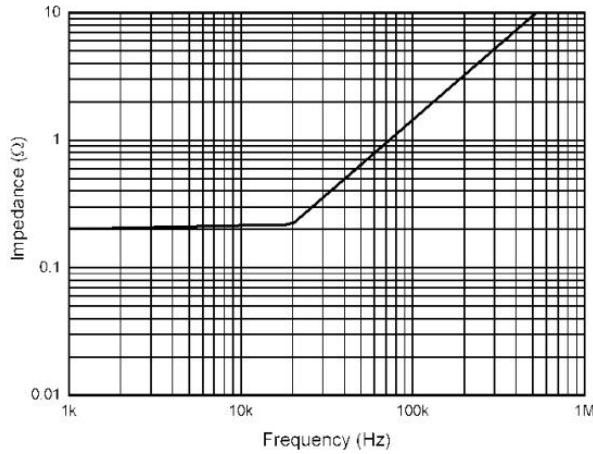


陰極電流與陰極電壓

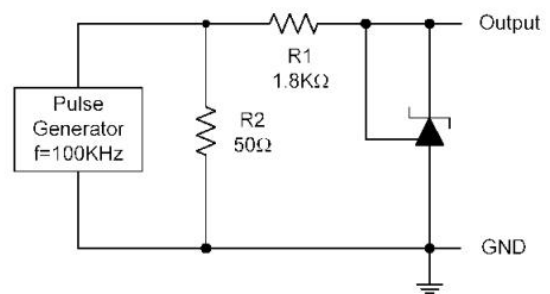
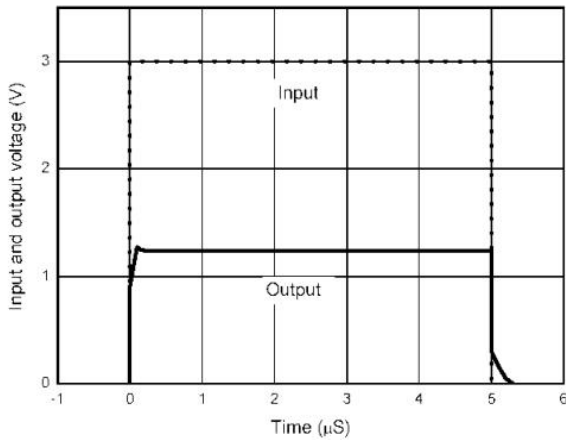
GM432



小信號電壓增益與頻率



動態阻抗與頻率

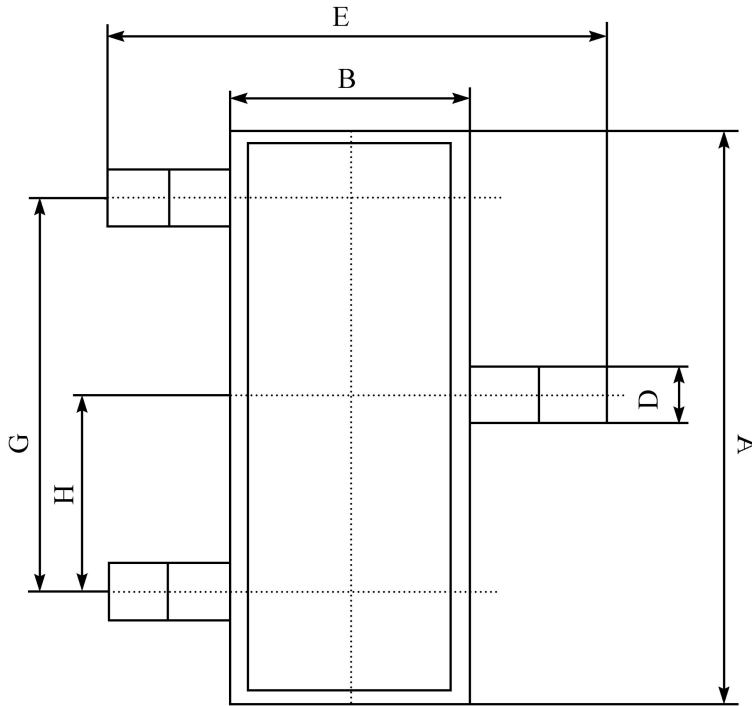


輸入與輸出電壓脈衝回應

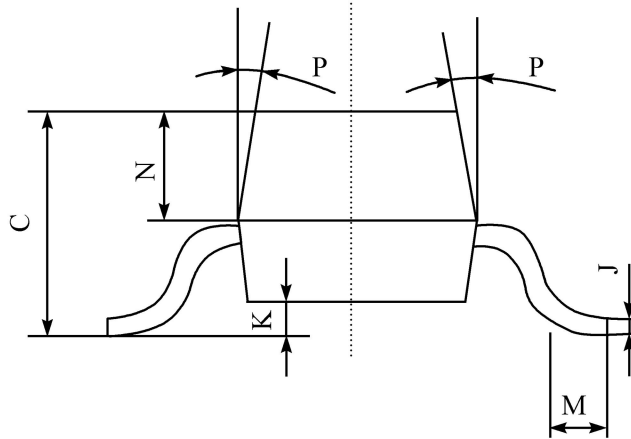
GM432

■SOT-23 外形封裝尺寸(DIMENSION)

單位(UNIT): mm

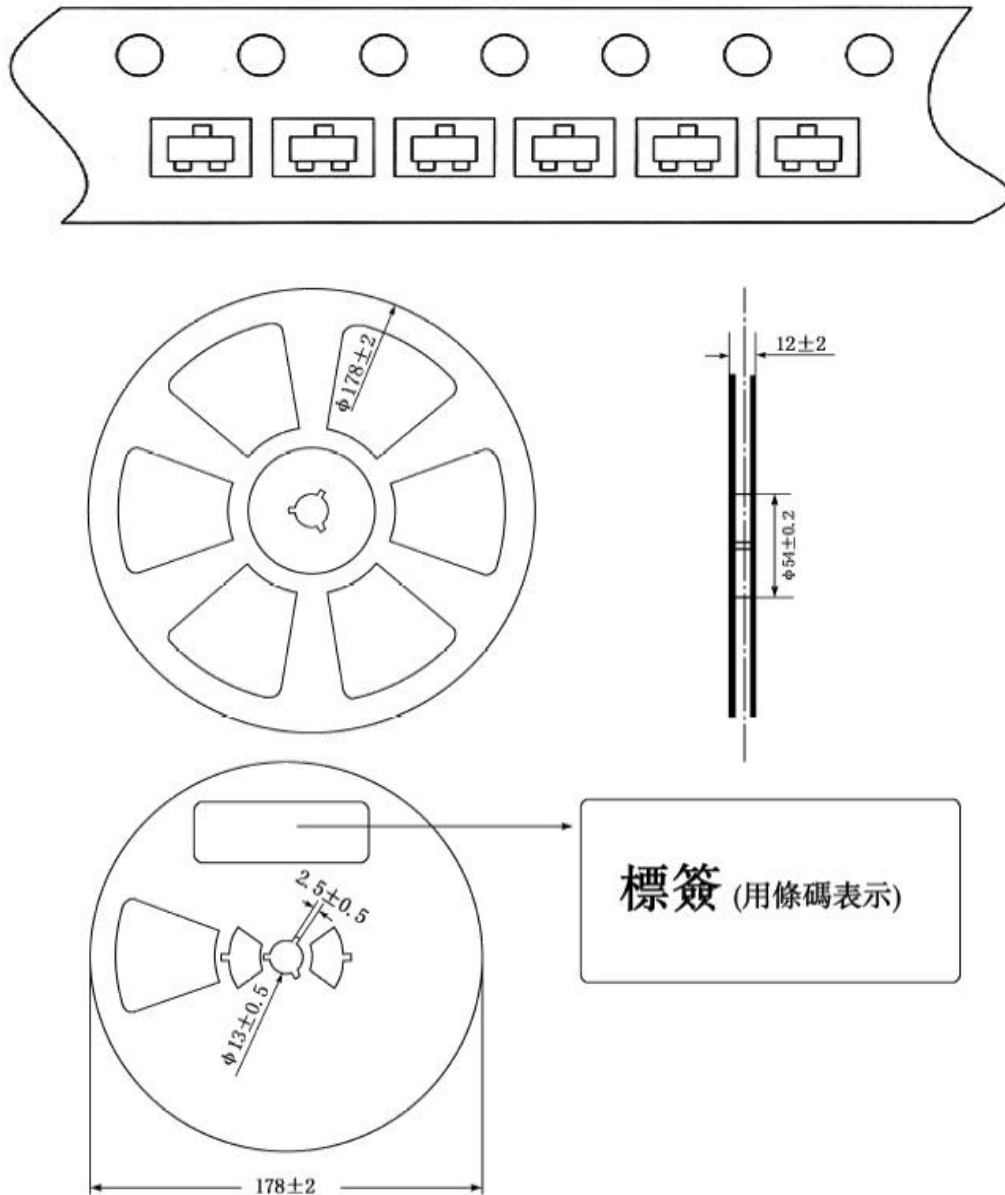


序號	數值及公差
A	2.90±0.10
B	1.30±0.10
C	1.00±0.10
D	0.40±0.10
E	2.40±0.20
G	1.90±0.10
H	0.95±0.05
J	0.13±0.05
K	0.00-0.10
M	≥0.2
N	0.60±0.10
P	7±2°



GM432

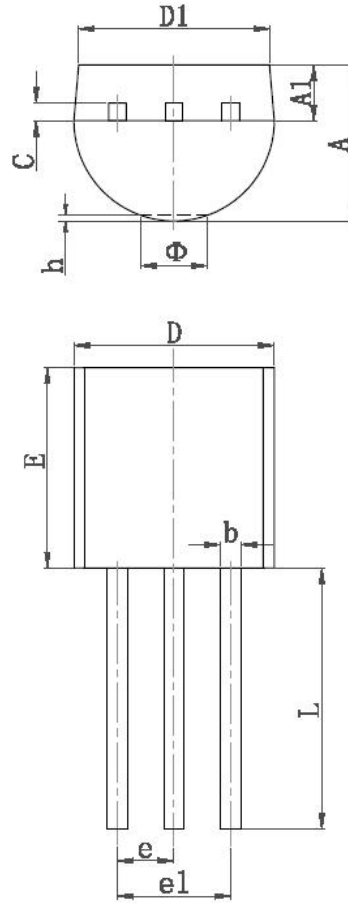
■SOT-23 卷盤包裝規格(Tape & Reel Package)



Package	Tape Width (mm)	Pitch (mm)	Reel Size (mm)	Device Per Reel and Minimum Order Quantity	Device Suffix
SOT-23	8	4.0±0.1	178	3,000	LT1
SOT-23	8	4.0±0.1	330	10,000	LT3

GM432

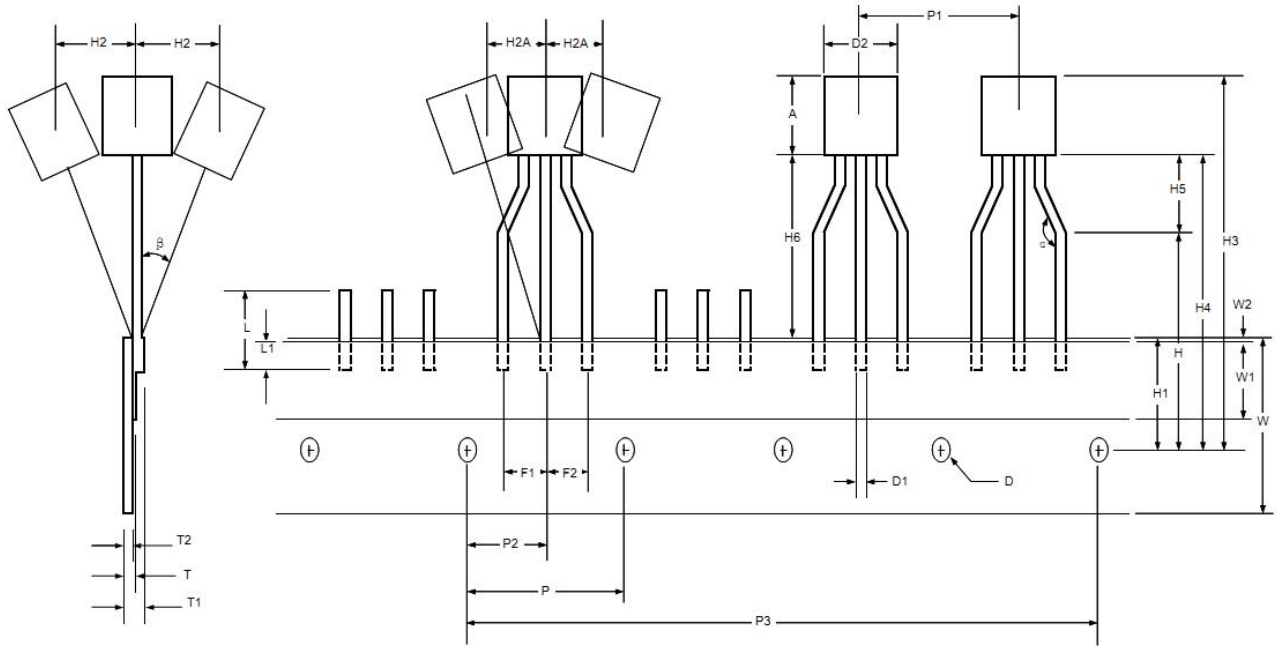
■TO-92 外形封裝尺寸(DIMENSION)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.300	3.700	0.130	0.146
A1	1.100	1.400	0.043	0.055
b	0.380	0.550	0.015	0.022
c	0.360	0.510	0.014	0.020
D	4.400	4.700	0.173	0.185
D1	3.430		0.135	
E	4.300	4.700	0.169	0.185
e	1.270TYPE		0.050TYPE	
e1	2.440	2.640	0.096	0.104
L	14.100	14.500	0.555	0.571
Φ		1.600		0.063
h	0.000	0.380	0.000	0.015

GM432

■TO-92 編帶包裝規格(Tapping Package)



symbol	mm		inch	
	min	max	min	max
A	4.40	4.80	0.173	0.189
D	3.80	4.20	0.150	0.165
D1	0.45	0.55	0.018	0.022
D2	4.40	4.80	0.173	0.189
F1,F2	2.40	2.90	0.094	0.114
F1-F2	-0.30	0.30	-0.012	0.012
H	15.50	16.50	0.610	0.650
H1	8.50	9.50	0.335	0.374
H2	-	1.00	-	0.039
H2A	-	1.00	-	0.039
H3	-	25.80	-	1.016
H4	-	21.00	-	0.827
H5	-	4.50	-	0.177
H6	-	12.50	-	0.492

symbol	mm		inch	
	min	max	min	max
L	-	11.00	-	0.433
L1	2.50	-	0.098	-
P	12.50	12.90	0.492	0.508
P1	12.50	12.90	0.492	0.508
P2	6.31	6.39	0.248	0.252
P3	50.30	51.30	1.980	2.020
T	-	0.55	-	0.022
T1	-	1.42	-	0.056
T2	0.36	0.55	0.014	0.022
W	17.50	19.00	0.689	0.748
W1	5.00	7.00	0.197	0.276
W2	-	0.50	-	0.020
α	145°	155°	145°	155°
β	-	4°	-	4°