/ Descriptions

SOT-23 NPN Silicon NPN transistor in a SOT-23 Plastic Package.

/ Features

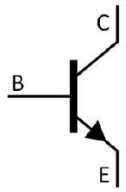
, KTA1505

Excellent hFE linearity, complementary pair with KTA1505.

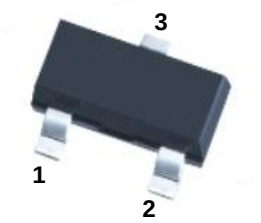
/ Applications

General amplifier and switching application.

/ Equivalent Circuit



/ Pinning



PIN 1 Base PIN 2 : Emitter PIN 3 Collector

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	O	Y	GR
h_{FE} Range	70 140	120 240	200 400
Marking	HWO	HWY	HWG

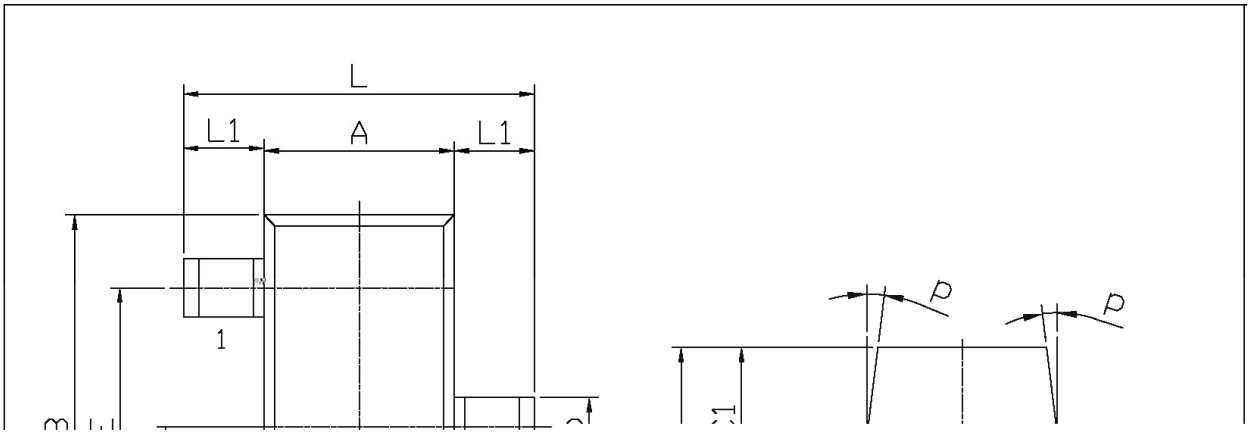
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	35	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	500	mA
Base Current	I_B	50	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55 150	℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=35V I_E=0			0.1	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=5.0V I_C=0			0.1	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=1.0V I_C=100mA	70		400	
	$h_{FE(2)}$	V_{CE}=6.0V I_C=400mA	25			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=100mA I_B=10mA		0.1	0.25	V
Base to Emitter Voltage	V_{BE}	V_{CE}=1.0V I_C=100mA		0.8	1.0	V
Transition Frequency	f_T	V_{CE}=6.0V I_C=20mA		300		MHz
Collector Output Capacitance	C_{ob}	V_{CE}=6.0V f=1.0MHz		7.0		pF

/ Electrical Characteristic Curve

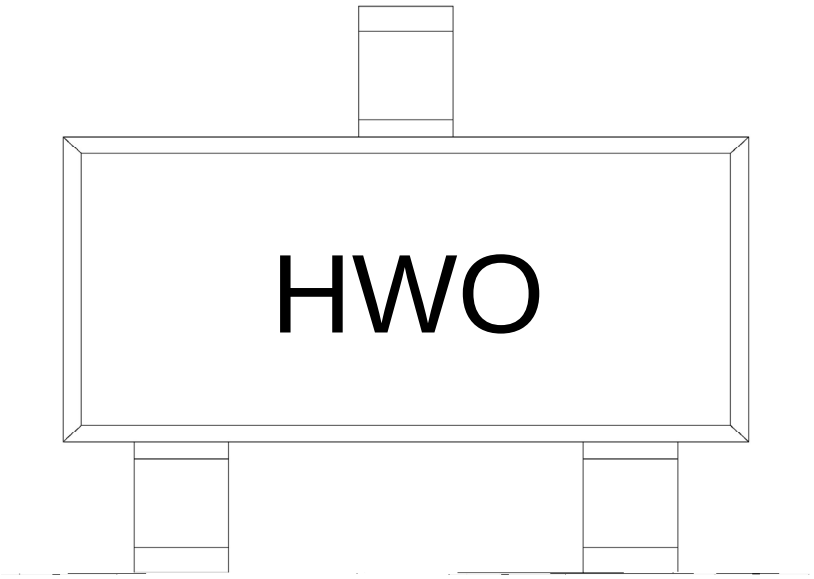
/ Package Dimensions

SOT-23 单位：mm



E	1.70	2.10	M	0.20MIN	
E1	0.85	1.05	θ	7°	

/ Marking Instructions



H

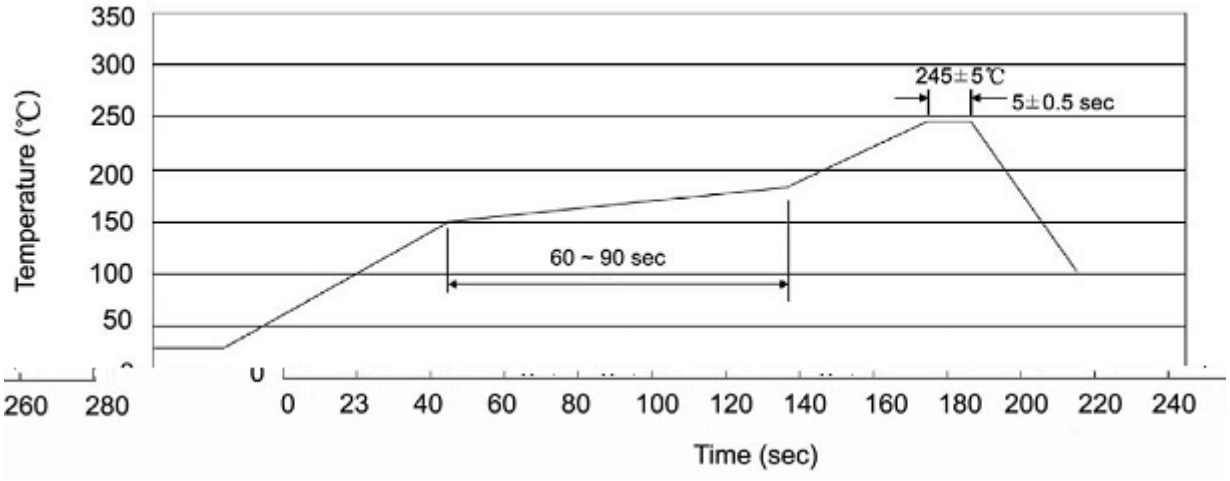
W

O h_{FE}

Note:

H	Company Code
W	Product Type
O	h_{FE} Classifications Symbol

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

1 25 150 60