

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

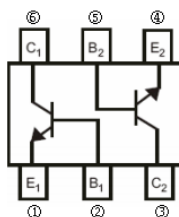
- Epitaxial Planar Die Construction
- Ideal for Low Power amplification and Switching

MARKING

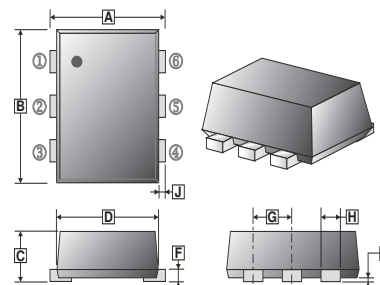
KAP

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-563	3K	7 inch



SOT-563



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.50	1.70	F	0.09	0.16
B	1.50	1.70	G	0.45	0.55
C	0.525	0.60	H	0.17	0.27
D	1.10	1.30	J	0.10	0.30
E	-	0.05			

MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V _{CB0}	60	V
Collector-Emitter Voltage	V _{CEO}	40	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current-Continuous	I _C	0.2	A
Collector Power Dissipation	P _C	0.2	W
Junction & Storage temperature	T _J , T _{STG}	150, -55~150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-Base Breakdown Voltage	V _{(BR)CBO}	60	-	-	V	I _C =10μA, I _E =0
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	40	-	-	V	I _C =1mA, I _B =0
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	5	-	-	V	I _E =10μA, I _C =0
Collector Cut-Off Current	I _{CBO}	-	-	0.05	uA	V _{CB} =30V, I _E =0
Emitter Cut-Off Current	I _{EBO}	-	-	0.05	uA	V _{EB} =5V, I _C =0
Collector Cut-Off Current	I _{CEx}	-	-	0.05	uA	V _{CE} =30V, V _{BE(off)} =3V
DC Current Gain	h _{FE(1)}	40	-	-		V _{CE} =1V, I _C =0.1mA
	h _{FE(2)}	70	-	-		V _{CE} =1V, I _C =1mA
	h _{FE(3)}	100	-	300		V _{CE} =1V, I _C =10mA
	h _{FE(4)}	60	-	-		V _{CE} =1V, I _C =50mA
	h _{FE(5)}	30	-	-		V _{CE} =1V, I _C =100mA
Collector-Emitter Saturation Voltage	V _{CE(sat)1}	-	-	0.2	V	I _C =10mA, I _B =1mA
	V _{CE(sat)2}	-	-	0.3	V	I _C =50mA, I _B =5mA
Base-Emitter Saturation Voltage	V _{BE(sat)1}	0.65	-	0.85	V	I _C =10mA, I _B =1mA
	V _{BE(sat)2}	-	-	0.95	V	I _C =50mA, I _B =5mA
Transition Frequency	f _T	300	-	-	MHz	V _{CE} =20V, I _C =10mA, f=100MHz
Collector Output Capacitance	C _{ob}	-	4	-	pF	V _{CB} =5V, I _E =0, f=1MHz
Delay Time	t _d	-	35	-	nS	V _{CC} =3V, V _{BE(off)} = -0.5V, I _C =10mA, I _{B1} = -I _{B2} =1mA
Rise Time	t _r	-	35	-		
Storage Time	t _s	-	200	-		
Fall Time	t _f	-	50	-		

TYPICAL CHARACTERISTICS

