

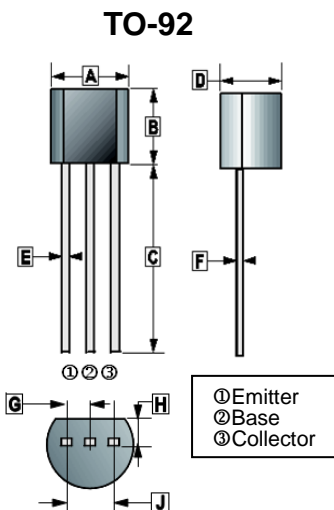
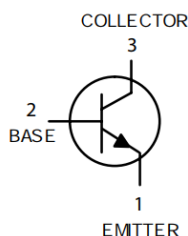
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Ideal for Medium Power Amplification and Switching
- Complementary PNP Type Available (MPS2907A)

ORDER INFORMATION

Part Number	Type
MPS2222A	Lead (Pb)-free
MPS2222A-C	Lead (Pb)-free and Halogen-free



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.30	4.70	F	0.30	0.51
B	4.30	4.70	G	1.27 TYP.	
C	12.70	14.5	H	1.10	1.40
D	3.30	3.81	J	2.42	2.66
E	0.36	0.56			

ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V _{CB0}	75	V
Collector to Emitter Voltage	V _{CEO}	40	V
Emitter to Base Voltage	V _{EBO}	6	V
Collector Current - Continuous	I _C	600	mA
Collector Power Dissipation	P _C	625	mW
Thermal Resistance From Junction To Ambient	R _{θJA}	200	°C / 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 Condition
Collector to Base Breakdown Voltage	V _{(BR)CBO}	75	-	-	V	I _C =10μA, I _E =0
Collector to Emitter Breakdown Voltage	V _{(BR)CEO}	40	-	-	V	I _C =10mA, I _B =0
Emitter to Base Breakdown Voltage	V _{(BR)EBO}	6	-	-	V	I _E =10μA, I _C =0
Collector Cut-Off Current	I _{CBO}	-	-	10	nA	V _{CB} =60V, I _E =0
Collector Cut-Off Current	I _{CEX}	-	-	10	nA	V _{CE} =60V, V _{BE(off)} =3V
Emitter Cut-Off Current	I _{EBO}	-	-	100	nA	V _{EB} =3V, I _C =0
DC Current Gain	h _{FE} (1)	40	-	-		V _{CE} =10V, I _C =0.1mA
	h _{FE} (2)	100	-	300		V _{CE} =10V, I _C =150mA
	h _{FE} (3)	42	-	-		V _{CE} =10V, I _C =500mA
Collector to Emitter Saturation Voltage	V _{CE(sat)}	-	-	0.3	V	I _C =150mA, I _B =15mA
	V _{CE(sat)}	-	-	0.6		I _C =500mA, I _B =50mA
Base to Emitter Voltage	V _{BE(sat)}	-	-	1.2	V	I _C =500mA, I _B =50mA
Transition Frequency	f _T	300	-	-	MHz	V _{CE} =20V, I _C =20mA, f=100MHz
Delay Time	t _d	-	10	-	nS	V _{CC} =30V, I _C =150mA, I _{B1} =15mA, V _{BE(off)} =-0.5V
Rise Time	t _r	-	25	-		
Storage Time	t _s	-	225	-		
Fall Time	t _f	-	60	-		

TYPICAL CHARACTERISTICS

