Elektronische Bauelemente

M28ST

1A , 40V

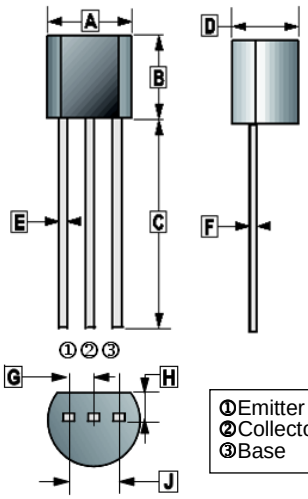
NPN Plastic Encapsulated Transistor

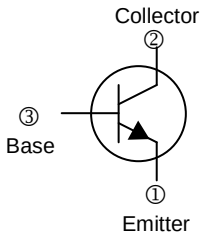
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURE

- High DC Current Gain and Large Current Capability

TO-92





①Emitter
②Collector
③Base

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.40	4.70	F	0.30	0.51
B	4.30	4.70	G	1.27 TYP.	
C	12.70	-	H	1.10	1.40
D	3.30	3.81	J	2.42	2.66
E	0.36	0.56	K	0.36	0.76

CLASSIFICATION OF $h_{FE\ (1)}$

Product-Rank	M28ST-B	M28ST-C	M28ST-D
Range	300~550	500~700	650~1000

ABSOLUTE MAXIMUM RATINGS at Ta = 25°C

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	6	V
Collector Currrent	I_C	1	A
Total Power Dissipation	P_D	0.625	W
Thermal Resistance From Junction	$R_{\theta JA}$	200	℃ / W
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	℃

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector-base Breakdown Voltage	$V_{(BR)CBO}$	40	-	-	V	I_C =100μA, I_E =0
Collector-emitter Breakdown Voltage	$V_{(BR)CEO}$	20	-	-	V	I_C =1mA, I_B =0
Emitter-base Breakdown Voltage	$V_{(BR)EBO}$	60	-	-	V	I_E =100μA, I_C =0
Collector Cut-off Current	I_{CBO}	-	-	1	μA	V_{CB} =40V, I_E=0
Collector Cut-off Current	I_{CEO}	-	-	5	μA	V_{CE} =20V, I_B = 0
Emitter Cut-off Current	I_{EBO}	-	-	0.1	μA	V_{EB} =5V, I_C = 0
DC Current Gain	h_{FE}	290	-	-		V_{CE} =1V, I_C =1mA
		300	-	1000		V_{CE} =1V, I_C =100mA
		300	-	-		V_{CE} =10V, I_C =300mA
Collector-emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.55	V	I_C =600mA, I_B =20mA
Transition Frequency	f_T	100	-	-	MHz	V_{CE} =10V, I_E=50mA, f=30MHz