Elektronische Bauelemente

KTD1898

1A , 100V

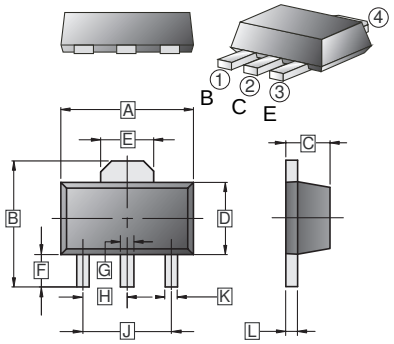
NPN Plastic Encapsulated Transistor

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

FEATURES

- Small Flat Package
- General Purpose Application

SOT-89

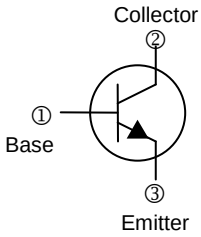


CLASSIFICATION OF $h_{FE(1)}$

Product-Rank	KTD1898-O	KTD1898-Y	KTD1898-GR
Range	70~140	120~240	200~400
Marking	ZO	ZY	ZG

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-89	1K	7 inch



REF.	Millimeter Min.	Millimeter Max.	REF.	Millimeter Min.	Millimeter Max.
A	4.40	4.60	G	0.40	0.58
B	3.94	4.25	H	1.50	TYP
C	1.40	1.60	J	3.00	TYP
D	2.25	2.60	K	0.32	0.52
E	1.50	1.85	L	0.35	0.44
F	0.89	1.20			

ABSOLUTE MAXIMUM RATINGS (T_A=25℃ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current-Continuous	I_C	1	A
Collector Power Dissipation	P_C	500	mW
Maximum Junction to Ambient	$R_{\theta JA}$	250	℃ / W
Junction & Storage Temperature	T_J, T_{STG}	150, -55~150	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	100	-	-	V	I_C=0.1mA, I_E=0
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	80	-	-	V	I_C=1mA, I_B=0
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-	V	I_E=0.1mA, I_C=0
Collector Cut-Off Current	I_{CBO}	-	-	0.1	μA	V_{CB}=80V, I_E=0
Emitter Cut-Off Current	I_{EBO}	-	-	0.1	μA	V_{EB}=4V, I_C=0
DC Current Gain	h_{FE}	70	-	400		V_{CE}=3V, I_C= 500mA
Collector-Emitter Saturation voltage	$V_{CE(sat)}$	-	-	0.4	V	I_C=500mA, I_B=20mA
Transition Frequency	f_T	-	100	-	MHz	V_{CE}=10V,I_C=50mA,f=100MHz
Collector Output Capacitance	C_{OB}	-	20	-	pF	V_{CB}=10V, I_E=0, f=1MHz