Elektronische Bauelemente

2SC1675

0.05 A , 50 V

NPN Plastic Encapsulated Transistor

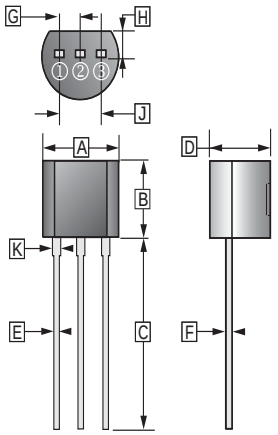
RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low Collector Current
- General Purpose Switching and Amplification

TO-92

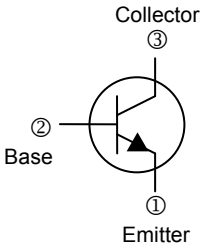


①Emitter
②Base
③Collector

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

CLASSIFICATION OF h_{FE}

Product-Rank	2SC1675-R	2SC1675-O	2SC1675-Y
Range	40~80	70~140	120~240



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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	50	V
Collector to Emitter Voltage	V_{CEO}	30	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current - Continuous	I_C	50	mA
Collector Power Dissipation	P_C	625	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	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 Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	50	-	-	V	I_C=10μA, I_E=0
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	30	-	-	V	I_C=5mA, I_B=0
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-	V	I_E=10μA, I_C=0
Collector Cut – Off Current	I_{CBO}	-	-	100	nA	V_{CB}=50V, I_E=0
Emitter Cut – Off Current	I_{EBO}	-	-	100	nA	V_{EB}=5V, I_C=0
DC Current Gain	h_{FE}	40	-	240		V_{CE}=6V, I_C=1mA
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.3	V	I_C=10mA, I_B=1mA
Base to Emitter voltage	V_{BE}	-	-	0.75	V	V_{CE}=6V, I_C=1mA
Transition Frequency	f_T	150	-	-	MHz	V_{CE}=6V, I_C=1mA
Collector Output Capacitance	C_{ob}	-	-	2.5	pF	V_{CB}=6V, I_E=0, f=1MHz