Elektronische Bauelemente

2SC3415

0.1A , 300V

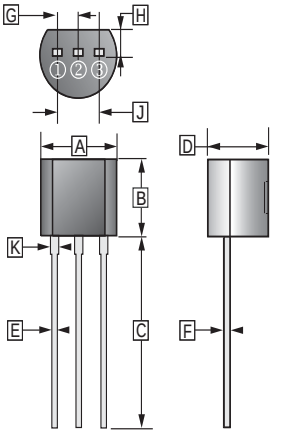
NPN Plastic-Encapsulated Transistor

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

FEATURES

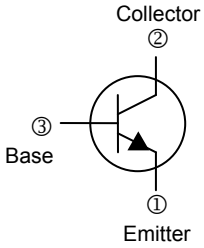
- High Breakdown Voltage
- Low Collector Output Capacitance
- Ideal for Chroma Circuit

TO-92



①Emitter
②Collector
③Base

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	2SC3415-M	2SC3415-N	2SC3415-P
Range	39~82	56~120	82~180

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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	300	V
Collector to Emitter Voltage	V_{CEO}	300	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current - Continuous	I_C	0.1	A
Collector Power Dissipation	P_C	0.5	W
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	250	°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	$V_{(BR)CBO}$	300	-	-	V	I_C=50μA, I_E=0
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	300	-	-	V	I_C=100μA, I_B=0
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-	V	I_E=50μA, I_C=0
Collector Cut – Off Current	I_{CBO}	-	-	0.5	μA	V_{CB}=200V, I_E=0
Emitter Cut – Off Current	I_{EBO}	-	-	0.5	μA	V_{EB}=4V, I_C=0
DC Current Gain	h_{FE}	39	-	180		V_{CE}=10V, I_C=10mA
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	2	V	I_C=50mA, I_B=5mA
Base to Emitter voltage	$V_{BE(sat)}$	-	-	1.2	V	I_C=50mA, I_B=5mA
Collector output capacitance	C_{ob}	-	3	-	pF	V_{CB}=30V, I_E=0, f=1MHz
Transition Frequency	f_T	-	50	-	MHz	V_{CE}=30V, I_C=10mA