Elektronische Bauelemente

BCP965

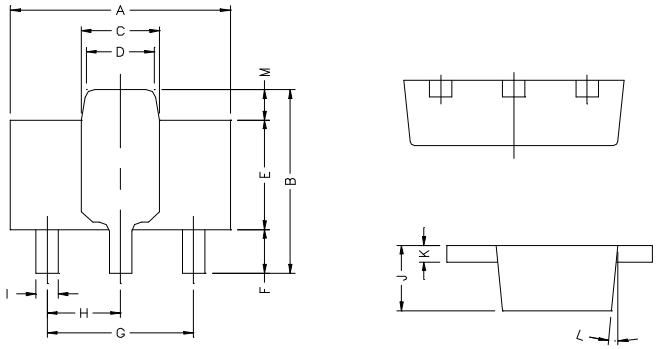
NPN Silicon
Epitaxial Planar Transistor

RoHS Compliant Product

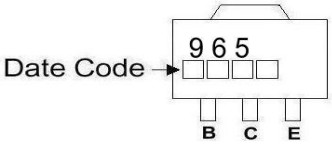
SOT-89

Description

The BCP965 is designed for use as AF output amplifier and flash unit.



Marking :



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.4	4.6	G	3.00 REF.	
B	4.05	4.25	H	1.50 REF.	
C	1.50	1.70	I	0.40	0.52
D	1.30	1.50	J	1.40	1.60
E	2.40	2.60	K	0.35	0.41
F	0.89	1.20	L	5° TYP.	
			M	0.70 REF.	

Absolute Maximum Ratings at T_A=25°C

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	20	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current (Continuous)	5	A
	Collector Current (Peak PT=10ms)	8	
P_D	Total Power Dissipation	1.2	W
T_J,T_{stg}	Junction and Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS Tamb=25°C unless otherwise specified

Parameter	Symbol	Min	Typ.	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV_{CBO}	40	-	-	V	I_C=100μA
Collector-Emitter Breakdown Voltage	BV_{CEO}	20	-	-	V	I_C= 1mA
Emitter-Base Breakdown Voltage	BV_{EBO}	7	-	-	V	I_E= 10μA
Collector-Base Cutoff Current	I_{CBO}	-	-	0.1	uA	V_{CB}= 60V
Emitter-Base Cutoff Current	I_{EBO}	-	-	0.1	uA	V_{EB}=7V
Collector Saturation Voltage	*V_{CE}(sat)	-	0.35	1	V	I_C=3A,I_B=0.1A
DC Current Gain	*h_{FE1}	230	-	800		V_{CE}= 2V, I_C=0.5A
	*h_{FE2}	150	-	-		V_{CE}= 2V, I_C=2A
Gain-Bandwidth Product	fT	-	150	-	MHz	V_{CE}= 6V, I_C= 50 mA
Output Capacitance	C_{ob}	-	-	50	pF	V_{CB}=20V, f=1MHz

*Pulse width≦380μs, Duty Cycle≦2%

Classification of hFE1

Rank	Q	R	S
Range	230~380	340~600	560~800

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Characteristics Curve