

RoHS Compliant Product

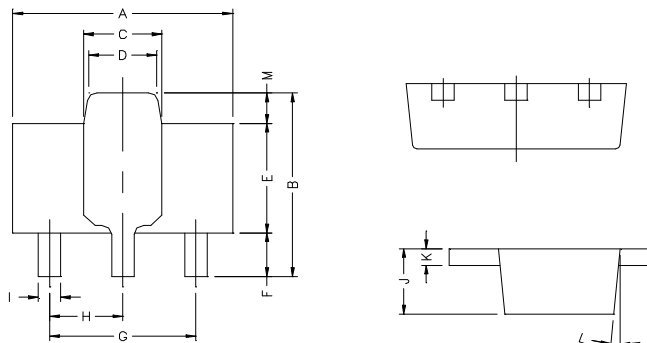
SOT-89

Description

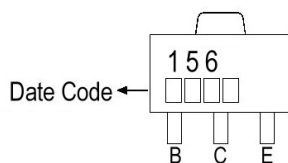
The BCP156 is designed for general purpose switching and amplifier applications.

Features

- * 3 Amp Continuous Current
- * 60 Volt V_{CEO}
- * Low Saturation Voltage



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 _{CB0}	Collector-Base Voltage	80	V
V _{CEO}	Collector-Emitter Voltage	60	V
V _{EB0}	Emitter-Base Voltage	5	V
I _C	Collector Current (DC)	3	A
	Collector Current (Pulse)	6	
P _D	Total Power Dissipation	1.2	W
T _J , T _{stg}	Junction and Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS T_{amb}=25°C unless otherwise specified

Parameter	Symbol	Min	Typ.	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BV _{CB0}	80	-	-	V	I _C =100μA, I _E =0
Collector-Emitter Breakdown Voltage	*BV _{CEO}	60	-	-	V	I _C =10mA, I _B =0
Emitter-Base Breakdown Voltage	BV _{EB0}	5	-	-	V	I _E =100μA, I _C =0
Collector-Base Cutoff Current	I _{CB0}	-	-	100	nA	V _{CB} = 60V, I _E =0
Emitter-Base Cutoff Current	I _{EB0}	-	-	100	nA	V _{EB} =4V, I _C =0
Collector Saturation Voltage	*V _{CE(sat)1}	-	0.12	0.3	V	I _C =1A, I _B =0.1A
	*V _{CE(sat)2}	-	0.43	0.6	V	I _C =3A, I _B =0.3A
Base-Emitter Saturation Voltage	*V _{BE(sat)}	-	0.9	1.25	V	I _C =1A, I _B =0.1A
	*V _{BE(on)}	-	0.8	1	V	I _C =1A, V _{CE} =2V
DC Current Gain	*h _{FE1}	70	200	-		V _{CE} = 2V, I _C =50mA
	*h _{FE2}	100	200	300		V _{CE} = 2V, I _C =500mA
	*h _{FE3}	80	170	-		V _{CE} = 2V, I _C =1A
	*h _{FE4}	40	80	-		V _{CE} = 2V, I _C =2A
Gain-Bandwidth Product	f _T	140	175	-	MHz	V _{CE} = 5V, I _C =100mA, f=100MHz
Output Capacitance	C _{ob}	-	-	30	pF	V _{CB} =10V, f=1MHz
Time-On	t _{on}	-	45	-	ns	V _{CC} = 10V, I _C =500mA, I _{B1} =I _{B2} =50mA
Time-Off	t _{off}	-	800	-		

* Measured under pulse condition. Pulse width ≤ 300μs, Duty Cycle ≤ 2%
Spice parameter data is available upon request for this device.

Characteristics Curve

