

M·C·C·

Micro Commercial Components



Micro Commercial Components
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2SD1835

Features

- Large Current Capacity.
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

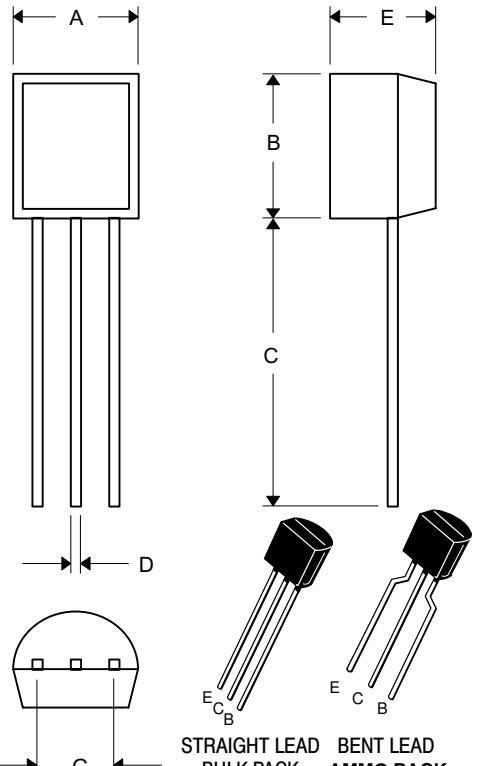
Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	50	V
V_{CBO}	Collector-Base Voltage	60	V
V_{EBO}	Emitter-Base Voltage	6.0	V
I_C	Collector Current, Continuous	2	A
T_J	Operating Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150	°C
R_{thja}	Thermal Resistance From Junction to Ambient	166	°C/W
P_D	Total Device Dissipation	750	mW

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
OFF CHARACTERISTICS				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ($I_E=1\text{mA}$, $I_B=0$)	50	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_E=10\text{uA}$, $I_B=0$)	60	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=10\text{uA}$, $I_C=0$)	6.0	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=50\text{Vdc}$, $I_E=0$)	---	100	nAdc
I_{EBO}	Base Cutoff Current ($V_{EB}=4\text{Vdc}$, $I_C=0$)	---	100	nAdc
h_{FE}	DC Current Gain ($V_{CE}=2.0\text{Vdc}$, $I_C=100\text{mA}$) ($V_{CE}=2.0\text{Vdc}$, $I_C=1500\text{mA}$)	100 40		560
$V_{CE(\text{sat})}$	Collector-Emitter Saturation Voltage ($I_C=1\text{Adc}$, $I_B=50\text{mA}$)		0.4	Vdc
$V_{BE(\text{sat})}$	Base-Emitter saturation Voltage ($I_C=1\text{Adc}$, $I_B=50\text{mA}$)		1.2	Vdc
C_{ob}	Collector Output Capacitance ($I_E=0$, $V_{CB}=10\text{Vdc}$, $f=1\text{MHz}$)	12(TYP)		pF
f_T	Transition frequency ($I_C=50\text{mA}$, $V_{CE}=10\text{Vdc}$)	150(TYP)		MHz

NPN Encapsulate Transistors

TO-92

DIMENSIONS					NOTE	
DIM	INCHES		MM			
	MIN	MAX	MIN	MAX		
A	.175	.185	4.45	4.70		
B	.175	.185	4.45	4.70		
C	.500	--	12.70	--		
D	.016	.020	0.41	0.63		
E	.135	.145	3.43	3.68		
G	.095	.105	2.42	2.67	Straight Lead	
	.173	.220	4.40	5.60	Bent Lead	

* For ammo packing detailed specification, click here to visit our website of product packaging for details.

www.mccsemi.com

Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 20Kpcs/Carton
Part Number-BP	Bulk: 100Kpcs/Carton

Note : Adding "-HF" suffix for halogen free, eg. Part Number-AP-HF

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