

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311 Phone: (818) 701-4933 Fax: (818) 701-4939

Features

- This device is designed for use as general purpose amplifiers and switches requiring collector currents to 300mA
- Lead Free Finish/RoHS Compliant ("P" Suffix designates
 RoHS Compliant See ordering information)
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 Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Marking:MPSA05

Maximum Ratings

Symbol	Rating	Rating	Unit
V _{CEO}	Collector-Emitter Voltage	60	V
V _{CBO}	Collector-Base Voltage	60	V
V _{EBO}	Emitter-Base Voltage	4.0	V
l _c	Collector Current, Continuous	500	mA
TJ	Operating Junction Temperature	-55 to +150	°C
T _{STG}	Storage Temperature	-55 to +150	°C

Thermal Characteristics

Symbol	Rating	Мах	Unit
PD	Total Device Dissipation	625	mW
	Derate above 25 ^o C	5.0	mW/°C
RJC	Thermal Resistance, Junction to Case	83.3	°C/W
R _{JA}	Thermal Resistance, Junction to Ambient	200	°C/W

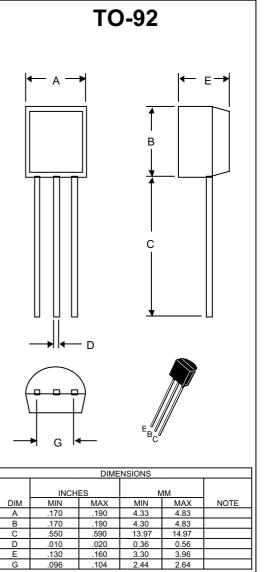
 Electrical Characteristics @ 25°C Unless Otherwise Specified

 Symbol
 Parameter
 Min
 Max
 Units

Symbol	raiametei	INITI	IVIAN	Units
OFF CHARA	CTERISTICS			
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage* (l _c =1.0mAdc, l _B =0)	60		Vdc
V _{(BR)EBO}	Emitter-Base Breakdown Voltage (ᡶ=100ì Adc, lc=0)	4.0		Vdc
Εο	Collector Cutoff Current (V _{CE} =60Vdc, ⊌=0)		0.1	uAdc
І _{сво}	Emitter Cutoff Current (V _{CB} =60Vdc, <u></u> =0)		0.1	uAdc
ON CHARA	CTERISTICS			
h _{FE}	DC Current Gain (V _{CE} =1.0Vdc, b=10mAdc) (V _{CE} =1.0Vdc, b=100mAdc)	100 100		
V _{CE(sat)}	Collector-Emitter Saturation Voltage (t=100mAdc, t=10mAdc)		0.25	Vdc
V _{BE(on)}	Base-Emitter On Voltage (t=100mAdc, V _{CE} =1.0Vdc)		1.2	Vdc
Small Sigr	nal Characteristics			
f _T	Current Gain Bandwidth Product (I _c =10mAdc, V _{CE} =2.0Vdc, f=100MHz)	100		MHz
* Pulse Tes	t: Pulse Width<300us, Duty Cycle<2.0%			

MPSA05

NPN General Purpose Amplifier





Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 2Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

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