

Micro Commercial Components

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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MPSA63 MPSA64

Features

- Capable of 1.5Watts of Power Dissipation
- Collector Current –500mA
- Operating Junction Temperature Range: -55°C to +150°C
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Marking:MPSA63,MPSA64

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{CBO}	Collector-Base Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-10	V
Ic	Collector Current, Continuous	-500	mA
TJ	Operating Junction Temperature	150	$^{\circ}\mathbb{C}$
T _{STG}	Storage Temperature	-55 to +150	$^{\circ}\mathbb{C}$

Thermal Characteristics

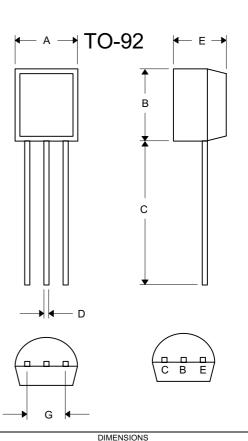
Symbol	Rating	Max	Unit
P_{D}	Total Device Dissipation @ T _A =25°C	625	mW
	Derate above 25℃	5.0	mW/°C
P _D	Total Device Dissipation @ T _A =25°C	1.5	Watts
	Derate above 25℃	12	mW/°C
R _{eJC}	Thermal Resistance, Junction to Case	83.3	°C/W
R _{θJA}	Thermal Resistance, Junction to Ambient	200	°C/W

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
OFF CHARACTERISTICS				
V _{(BR)CEO} Collector-Emitter Breakdown Voltage -30 (I _C =-100µAdc,V _{BE} =0)			Vdc	
I _{CBO}	Collector Cutoff Current (V _{CB} =-30c, I _E =0)		-100	nAdc
I _{EBO}	Emitter Cutoff Current (V _{EB} =-0Vdc, I _C =0)		-100	nAdc

^{*} Pulse Test: Pulse Width<300us, Duty Cycle<2.0%

PNP Darlington Transistor



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.170	.190	4.33	4.83	
В	.170	.190	4.30	4.83	
С	.550	.590	13.97	14.97	
D	.010	.020	0.36	0.56	
Е	.130	.160	3.30	3.96	
G	.096	.104	2.44	2.64	
					<u>.</u>



Symbol	Parameter		Min	Тур	Max	Units
ON CHA	RACTERISTICS ⁽¹⁾					
h _{FE}	DC Current Gain (V _{CE} =-5.0Vdc, I _C =-10mAdc)	MPSA63 MPSA64	5000 10000	 	 	
	(V _{CE} =-5.0Vdc, I _C =-100mA)	MPSA63 MPSA64	10000 20000			
$V_{\text{CE(sat)}}$	Collector-Emitter Saturation Voltage (I _C =-100mAdc, I _B =-0.1mAdc)				-1.5	Vdc
V _{BE(on)}	Base-Emitter On Voltage (I _C =-100mAdc, V _{CE} =-5.0Vdc)				-2.0	Vdc
SMALL-	SIGNAL CHARACTERISTICS		•			
f _T	Current-GainBandwidth Product ⁽²⁾ (V _{CE} =-5.0Vdc, f=100MHz,I _C =-100mAdc)		125			MHz

Pulse Test: Pulse Width<300us, Duty Cycle<2.0% Pulse Test
 f_T=h_{fe}×f_{tes}t



Ordering Information

Device	Packing
(Part Number)-AP	Tape&Reel2Kpcs/Box
(Part Number)-BP	Bulk;1Kpcs/Bag

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MPSA64-AP