



Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311

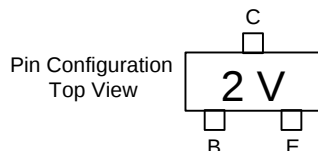
Phone: (818) 701-4933

Fax: (818) 701-4939

MMBTA64

Features

- This device is designed for applications requiring extremely high current gain at currents to 800mA.
- Marking Code: MMBTA64=2V



Maximum Ratings*

Symbol	Rating	Rating	Unit
V_{CES}	Collector-Emitter Voltage	30	V
V_{CBO}	Collector-Base Voltage	30	V
V_{EBO}	Emitter-Base Voltage	10	V
I_C	Collector Current, Continuous	1.2	A
T_J	Operating Junction Temperature	-55 to +150	°C
T_{STG}	Storage Temperature	-55 to +150	°C

Thermal Characteristics

Symbol	Rating	Max	Unit
P_D	Total Device Dissipation* Derate above 25°C	350 2.8	mW mW/°C
R_{JA}	Thermal Resistance, Junction to Ambient	357	°C/W

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
--------	-----------	-----	-----	-------

OFF CHARACTERISTICS

$V_{(BR)CES}$	Collector-Emitter Breakdown Voltage ($I_C=100\mu A$, $I_B=0$)	30	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=30Vdc$, $I_E=0$)	---	100	nAdc
I_{EBO}	Emitter Cutoff Current ($V_{EB}=10Vdc$, $I_C=0$)	---	100	nAdc

ON CHARACTERISTICS**

h_{FE}	DC Current Gain ($V_{CE}=5.0Vdc$, $I_C=10mA$) ($V_{CE}=5.0Vdc$, $I_C=100mA$)	10000 20000	---	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=100mA$, $I_B=0.1mA$)	---	1.5	Vdc
$V_{BE(sat)}$	Base-Emitter On Voltage ($I_C=100mA$, $V_{CE}=5.0Vdc$)	---	2.0	Vdc
f_T	Current-Gain—Bandwidth Product ($I_C=10mA$, $V_{CE}=5.0Vdc$, $f=100MHz$)	125	---	MHz

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

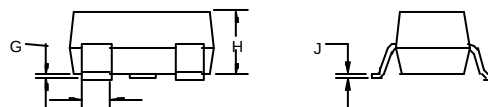
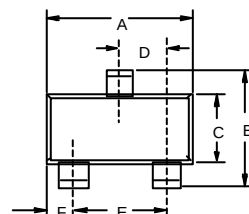
** Pulse Test: Pulse Width<300us, Duty Cycle<2.0%

Note: 1) These rating are based on a maximum junction temperature of 150 degrees C.

2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

PNP Darlington Transistor

SOT-23



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.098	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

Suggested Solder Pad Layout

