

NPN SILICON PLANAR POWER TRANSISTOR



TO-3 Metal Can Package

BU208A

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNITS	
Collector Emitter Voltage	V _{CEO (sus)}	700	V	
Collector Emitter Voltage	V _{CES}	1500	V	
Emitter Base Voltage	V _{EBO}	5.0	V	
Collector Current Continuous	Ι _C	5.0	A	
Peak	I _{CM}	7.5		
Base Current Continuous	I _B	4.0	A	
Peak (Negative)	I _{BM}	3.5		
Power Dissipation @ T _c =95 ^o C	PD	12.5	W	
Derate Above 95ºC		0.625	W/ºC	
Operating and Storage Junction	T _i , T _{stg}	- 65 to +115	°C	
Temperature Range				

THERMAL RESISTANCE

Junction to Case	R _{th(j-c)}	1.6	°C/W
Maximum Lead Temperature for	Τ _L	275	°C
Soldering Purpose 1/8" from Case for			
5 Seconds			

ELECTRICAL CHARACTERISTICS (T_c=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	Тур	MAX	UNITS
Collector Emitter Sustaing Voltage	V _{CEO (sus)} *	I _C =100mA, L=25mH	700			V
Collector Cut off Current	I _{CES}	V_{CE} =Rated V_{CES} , V_{BE} =0			1.0	mA
Emitter Base Voltage	V _{EBO}	I _E =10mA, I _C =0	5.0			V
		I _E =100mA, I _C =0		7.0		
DC Current Gain	h _{FE} *	I _C =4.5A, V _{CE} =5V	2.25			
Collector Emitter Saturation Voltage	V _{CE (sat)} *	I _C =4.5A, I _B =2A			1.0	V
Base Emitter Saturation Voltage	V _{BE (sat)} *	I _C =4.5A, I _B =2A			1.5	V

Dynamic Characteristics

Current Gain Bandwidth Product	f _⊤	I _C =0.1A, V _{CE} =5V,f=1MHz	4.0	MHz
Output Capacitance	C _{ob}	V_{CB} =10V, I_{E} =0, f=1MHz	125	pF

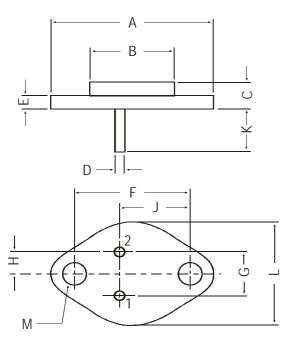
Switching Characteristics

Storage Time	t _S	I _C =4.5A, I _{B1} =1.8A, L _B =10μH	8.0	μs
Fall Time	t _f	I _C =4.5A, I _{B1} =1.8A, L _B =10μH	0.4	μs

Pulse test: PW=300ms; Duty Cycle<2%

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	DIM	MIN.	MAX.
	А		39.37
	В	_	22.22
	С	6.35	8.50
	D	0.96	1.09
	Е	_	1.77
	F	29.90	30.40
mm	G	10.69	11.18
ini	Н	5.20	5.72
ons	J	16.64	17.15
ensi	К	11.15	12.25
dimensions in mm.	L	_	26.67
All (Μ	3.84	4.19



PIN CONFIGURATION

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- 1. BASE
- 2. EMITTER
- 3. COLLECTOR

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
ТО-3	100 pcs/pkt	1.3 kg/100 pcs	12.5" x 8" x 1.8"	0.1K	17" x 11.5" x 21"	2K	27.5 kgs

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Disclaimer

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