

Complementary Silicon Plastic Power Transistors

MJE15028, MJE15030 (NPN), MJE15029, MJE15031 (PNP)

These devices are designed for use as high frequency drivers in audio amplifiers.

Features

- High Current Gain Bandwidth Product
- TO 220 Compact Package
- These Devices are Pb Free and are RoHS Compliant*



1
2
3

MARKING DIAGRAM

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector–Emitter Voltage MJE15028G, MJE15029G MJE15030G, MJE15031G	V_{CEO}	120 150	Vdc
Collector–Base Voltage MJE15028G, MJE15029G MJE15030G, MJE15031G	V_{CB}	120 150	Vdc
Emitter–Base Voltage	V_{EB}	5.0	Vdc
Collector Current – Continuous	I_C	8.0	Adc
Collector Current – Peak	I_{CM}	16	Adc
Base Current	I_B	2.0	Adc
Total Device Dissipation @ $T_C = 25^\circ\text{C}$ Derate above 25°C	P_D	50 0.40	W W/ $^\circ\text{C}$
Total Device Dissipation @ $T_A = 25^\circ\text{C}$ Derate above 25°C			

	$R_{\theta JC}$	2.5
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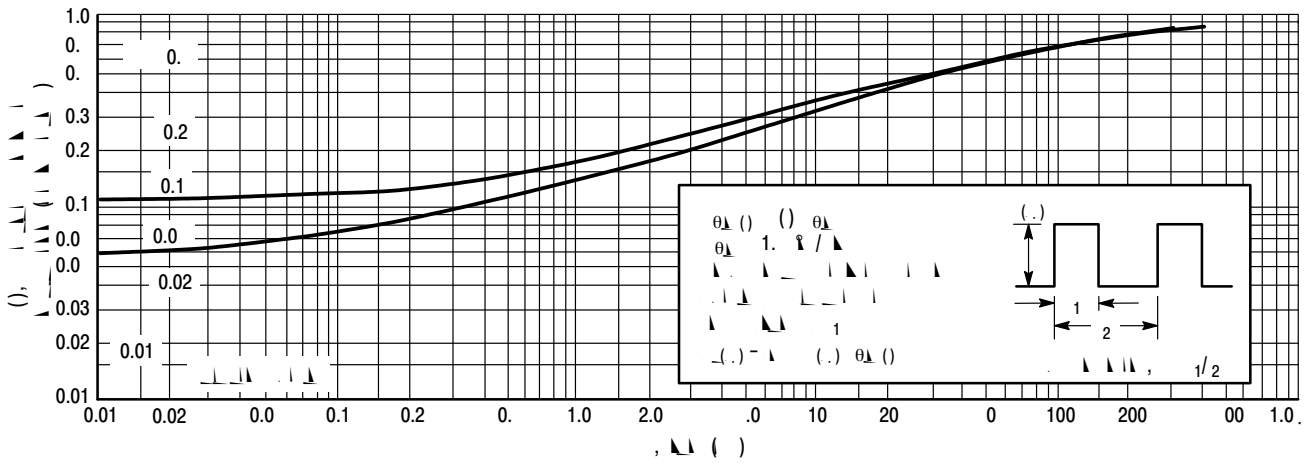


Figure 2. Thermal Response

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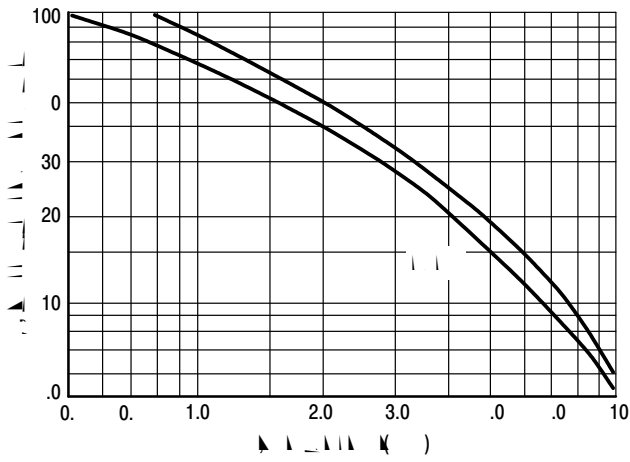


Figure 6. Small-Signal Current Gain

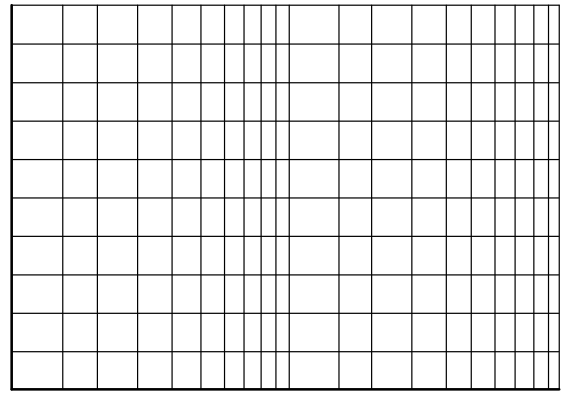
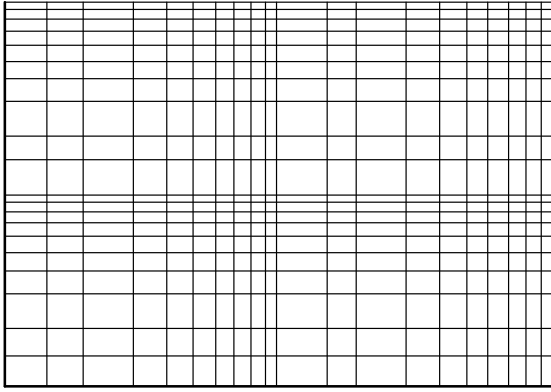


Figure 7. Current Gain-, SMALL SIGN320DRfBT8 00 AM90.06

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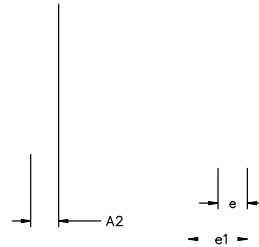


TO-220-3 10.10x15.12x4.45, 2.54P
CASE 221A
ISSUE AL

DATE 05 FEB 2025

A

$\Phi 0.14 \text{ (M)} \text{ C A (M)}$



$\Phi 0.15 \text{ (M)} \text{ C A (M)}$

MILLIMETERS			
DIM	MIN	NOM	MAX
A	4.07	4.45	4.83
A1	1.15	1.28	1.41
A2	2.04	2.42	2.79
b	1.15	1.34	1.52
b1	0.64	0.80	0.96
c	0.36	0.49	0.61
D	9.66	10.10	10.53
D1	8.43	8.63	8.83
E	14.48	15.12	15.75
E1	12.58	12.78	12.98
E2	1.27 REF		

MILLIMETERS			
DIM	MIN	NOM	MAX
e	2.42	2.5	
			J
Q	2.54	2.79	3.04
ϕP	3.60	3.85	4.09
Z	---	---	3.48

NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.

Y 1		Y 2		Y 3		Y 4		1
1.		1.		1.		1.		2
2.		2.		2.		2.		2
.		.		.		.		2
Y 5		Y 6		Y 7		Y 8		/ Y
1.		1.		1.		1.		
2.	U	2.		2.		2.		
.		.		.		.		
Y 9		Y 10		Y 11		Y 12		1
1.		1.		1.		1.		2
2.		2.	U	2.	U	2.		
.		.	U	.	U	.		

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