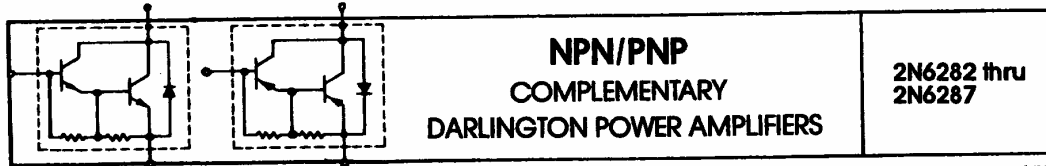


CRYSTALONCS  
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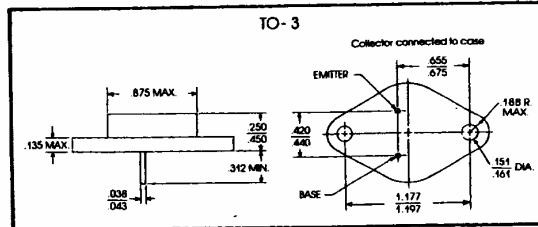


**NPN/PNP  
 COMPLEMENTARY  
 DARLINGTON POWER AMPLIFIERS**

**2N6282 thru  
 2N6287**

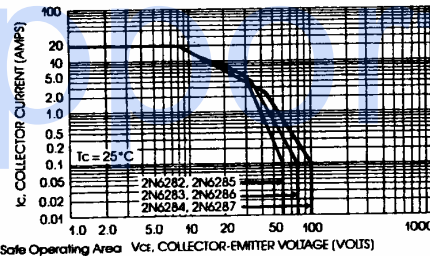
**GEOMETRY 509-1**

- NPN 2N6282-84
- PNP 2N6285-87
- High Gain
- Monolithic Construction



**MAXIMUM RATINGS**

PARAMETER	UNIT	2N6282 2N6285	2N6283 2N6286	2N6284 2N6287	UNIT
Collector-Emitter Voltage	V <sub>CEO</sub>	60	80	100	V
Collector-Base Voltage	V <sub>CBO</sub>	60	80	100	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	5	5	V
Collector Current-Continuous		20			A
Collector Current-Peak		40			A
Base Current		0.5			A
Power Dissipation @ T <sub>C</sub> 25°C		160			W
Linear Derating Factor		0.915			W/°C
Storage & Operating Junction Temperature Range		-65°C to +200°C			
Lead Temperature (1/16" from case)		+235°C			



**ELECTRICAL CHARACTERISTICS AT 25°C CASE TEMPERATURE**

PARAMETER	SYMBOL	TEST CONDITIONS	2N6282 2N6285		2N6283 2N6286		2N6284 2N6287		UNIT
			MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	
Collector Cutoff Current (Emitter diode is reverse biased)	I <sub>CX</sub>	V <sub>CE</sub> = 60V		5.0					mA
		V <sub>CE</sub> = 80V				5.0			
		V <sub>CE</sub> = 100V					5.0		
Collector Cutoff Current (Emitter diode is reverse biased)	I <sub>CX</sub>	V <sub>CE</sub> = 60V		0.5					mA
		V <sub>CE</sub> = 80V				0.5			
		V <sub>CE</sub> = 100V					0.5		
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> = 5V		2.0		2.0		2.0	mA
Collector-Emitter Open Base* Sustain Voltage	V <sub>CEO(sus)</sub>	I <sub>B</sub> = 0, I <sub>C</sub> = 100mA	60		80		100		V
Collector Cutoff Current, Base Open	I <sub>CEO</sub>	I <sub>B</sub> = 0, V <sub>CE</sub> = 30V		1.0					mA
		I <sub>B</sub> = 0, V <sub>CE</sub> = 40V				1.0 <sup>1</sup>			
		I <sub>B</sub> = 0, V <sub>CE</sub> = 50V					1.0		
DC Forward Current Transfer Ratio*	h <sub>FE</sub>	I <sub>C</sub> = 20A, V <sub>CE</sub> = 3V	100		100		100		
		I <sub>C</sub> = 10A, V <sub>CE</sub> = 3V	750	18,000	750	18,000	750	18,000	
Collector-Emitter Saturation Voltage*	V <sub>CE(sat)</sub>	I <sub>C</sub> = 20A, I <sub>B</sub> = 0.2A		3.0		3.0		3.0	V
		I <sub>C</sub> = 10A, I <sub>B</sub> = 40mA		2.0		2.0		2.0	
Base-Emitter Voltage*	V <sub>BE</sub>	I <sub>C</sub> = 10A, V <sub>CE</sub> = 3V		2.8		2.8		2.8	V
Base-Emitter Saturation Voltage*	V <sub>BE(sat)</sub>	I <sub>C</sub> = 20A, I <sub>B</sub> = 200mA		4.0		4.0		4.0	V
High Frequency Beta	h <sub>fe</sub>	V <sub>CE</sub> = 3V, I <sub>C</sub> = 10A, f = 1MHz	4		4		4		
Low Frequency Beta	h <sub>fe</sub>	V <sub>CE</sub> = 3V, I <sub>C</sub> = 10A, f = 1kHz	300		300		300		
			2N6282, 2N6283 2N6284		2N6285, 2N6286 2N6287				UNIT
Common Base Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10V, I <sub>E</sub> = 0A, f = 0.1MHz	MIN.	MAX.	MIN.	MAX.			
				400		600			pF

\*Pulse Width < 300μs; Duty Cycle < 2%