PIC 500 DUAL DARLINGTON

TYPE NO. CBCA011

GROUP A AND/OR PERFORMANCE CHARACTERISTICS

	NO.	SYMBOL	CONDITIONS	MIN.	MAX.	UNITS	
DARLINGTON TRANSISTOR	1	V-CEO(sus)	IC=10mA	100		V	
	2	V-CBO	IC=1.0mA	100		V	
	3	V-EBO	IE=5.0mA	5.0		V	
	4	h-FE1	IC=5.0A VCE=5.0V	2000			
	5	h-FE1	IC=5.0A VCE=5.0V TA=-55°C	750			A
	6	h-FE2	IC=2.0A VCE=2.0V	1000			
	7	V-CE(s)	IC=5.0A IB=10mA		1.5	V	
	8	V-BE(s)	IC=5.0A IB=10mA		2.0	V	
	9	I-CEO	VCE=60V		100	NA	
	10	I-CEO	VCE=60V TA=+150°C		200	UA	
	11	I-EBO	VEB=5.0V	2.0	5.0	mA	
	12	td	VCC=30V IC=5.0A IB1=IB2=10mA FIG.1		50	Nsec	
	13	tr			250	Nsec	
	14	ts			1.5	Usec	
	15	tf			500	Nsec	
COMMUTATING DIODES	16	Es/b	IC=5.0A L=80mA FIG.2	1.0		J	
	17	BV	IR=100UA	100		V	
	18	IR	VR=60V		1.0	UA	B
	19	IR	VR=60V TA=+125°C		500	UA	B
	20	VF	IF=5.0A		1.5	V	
	21	Trr	IF=1.0A IR=1.0A		1.0	uA	B
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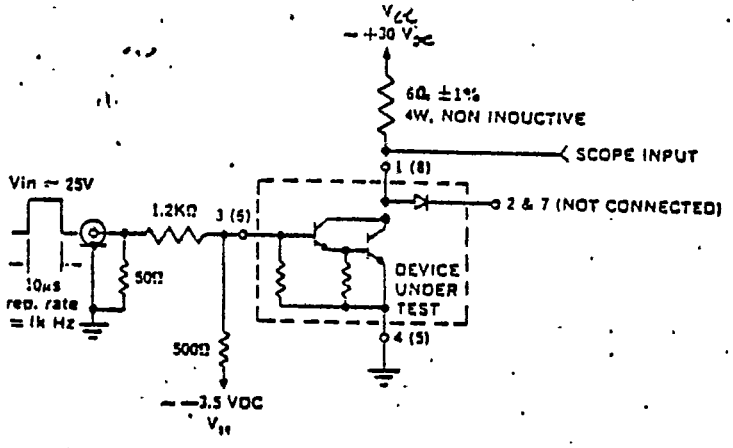
TYPE NO. CBCA 011

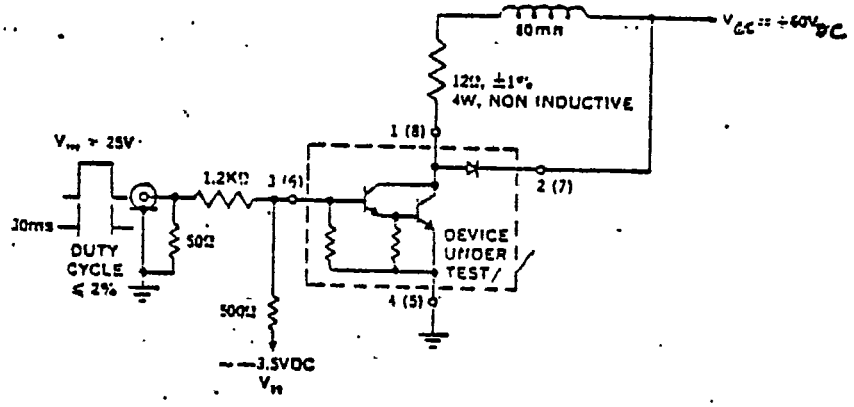
ADDITIONAL REQUIREMENTS

Figure 1.
PIC500, PIC501, PIC502
Switching Speed Circuit



NOTE: The V_{in}/ V_{CC} and V_{EE} voltages are only approximate and should be adjusted to give I_C = 5.0A, I_1 = 10mA and I_{EE} = 10mA.

Figure 2
PIC500, PIC501, PIC502
Switching Energy Circuit



NOTE: The V_{in} voltage is only approximate and should be adjusted to give I_C = 5.0A.