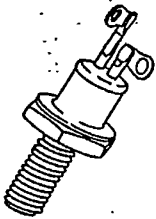


Reference SA01TY23

DIGITRON

092386

DGE



2N series

SCR

M-03

C10 SERIES
2N1770A-2N1777A

MAXIMUM ALLOWABLE RATINGS

TYPE	PEAK FORWARD BLOCKING VOLTAGE, V_{FOM} $T_c = -65^\circ\text{C to } +150^\circ\text{C}$	REPETITIVE PEAK REVERSE VOLTAGE, V_{ROR} (rep) ⁽¹⁾ $T_c = -65^\circ\text{C to } +150^\circ\text{C}$	NON-REPETITIVE PEAK REVERSE VOLTAGE (≤ 0 millise) ⁽²⁾ , V_{ROR} (non-rep) $T_c = -65^\circ\text{C to } +150^\circ\text{C}$
C10U (2N1770A)	25 Volts*	25 Volts*	85 Volts*
C10F (2N1771A)	50 Volts*	50 Volts*	75 Volts*
C10A (2N1772A)	100 Volts*	100 Volts*	150 Volts*
C10G (2N1773A)	150 Volts*	150 Volts*	225 Volts*
C10B (2N1774A)	200 Volts*	200 Volts*	300 Volts*
C10H (2N1775A)	250 Volts*	250 Volts*	350 Volts*
C10C (2N1776A)	300 Volts*	300 Volts*	400 Volts*
C10D (2N1777A)	400 Volts*	400 Volts*	500 Volts*

C10 SERIES

CHARACTERISTICS

TEST	SYMBOL	MIN.	MAX.	UNITS	TEST CONDITIONS
PEAK REVERSE OR FORWARD BLOCKING CURRENT† C10U (2N1770A) C10F (2N1771A) C10A (2N1772A) C10G (2N1773A) C10B (2N1774A) C10H (2N1775A) C10C (2N1776A) C10D (2N1777A)	I_{ROR} or I_{FOM}	—	9.0 9.0 9.0 8.0 6.0 5.0 4.0 2.0	mA	$T_c = -65^\circ\text{C to } +150^\circ\text{C}$ $V_{ROR} = V_{FOM} = 25\text{V Peak}$ $V_{ROR} = V_{FOM} = 50\text{V Peak}$ $V_{ROR} = V_{FOM} = 100\text{V Peak}$ $V_{ROR} = V_{FOM} = 150\text{V Peak}$ $V_{ROR} = V_{FOM} = 200\text{V Peak}$ $V_{ROR} = V_{FOM} = 250\text{V Peak}$ $V_{ROR} = V_{FOM} = 300\text{V Peak}$ $V_{ROR} = V_{FOM} = 400\text{V Peak}$
FULL CYCLE AVG. REVERSE OR FORWARD BLOCKING CURRENT† C10U (2N1770A) C10F (2N1771A) C10A (2N1772A) C10G (2N1773A) C10B (2N1774A) C10H (2N1775A) C10C (2N1776A) C10D (2N1777A)	$I_{RX (AV)}$ or $I_{FX (AV)}$	—	4.5* 4.5* 4.5* 4.0* 3.0* 2.5* 2.0* 1.0*	mA	$T_c = +105^\circ\text{C}$, $I_o = 4.7\text{A}$ 180° Conduction Angle $V_{RXM} = V_{FXM} = 25\text{V Peak}$ $V_{RXM} = V_{FXM} = 50\text{V Peak}$ $V_{RXM} = V_{FXM} = 100\text{V Peak}$ $V_{RXM} = V_{FXM} = 150\text{V Peak}$ $V_{RXM} = V_{FXM} = 200\text{V Peak}$ $V_{RXM} = V_{FXM} = 250\text{V Peak}$ $V_{RXM} = V_{FXM} = 300\text{V Peak}$ $V_{RXM} = V_{FXM} = 400\text{V Peak}$
GATE TRIGGER CURRENT	I_{GT}	—	15 30*	mAdc	$T_c = +25^\circ\text{C}$, $V_{FX} = 12\text{Vdc}$, $R_i = 250\text{ ohms}$ $T_c = -65^\circ\text{C}$, $V_{FX} = 12\text{Vdc}$, $R_i = 250\text{ ohms}$
GATE TRIGGER VOLTAGE	V_{GT}	—	2.0*	Vdc	$T_c = -65^\circ\text{C to } +150^\circ\text{C}$, $V_{FX} = 12\text{Vdc}$, $R_i = 250\text{ ohms}$ $T_c = +150^\circ\text{C}$, $V_{FXM} = \text{Rated } V_{FOM}$, $R_i = 250\text{ ohms}$
PEAK ON-VOLTAGE	V_{FM}	—	1.85	V	$T_c = +25^\circ\text{C}$, $I_{FXM} = 15\text{A Peak}$, 1 millisecond wide pulse. Duty cycle $\leq 1\%$.
HOLDING CURRENT	I_{HO}	—	25	mAdc	$T_c = +25^\circ\text{C}$, Anode supply = 24 Vdc, Gate Supply = 7V, 20 ohms. Initial forward current pulse = 0.5A, 0.1 millisecond to 10 milliseconds wide.
EFFECTIVE THERMAL RESISTANCE (DC)	θ_{j-c}	—	3.1	°C/watt	Junction to case.

EDITOR *[Signature]*

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