DIGITRON

092386

Reference No. SA01TY23

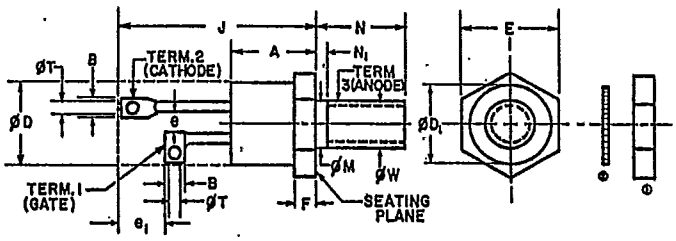
DGE

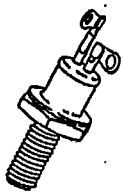
SCR

TY-03

C15 SERIES

OUTLINE DRAWING
(Complies with JEDEC registered TO-64 outline)





C10 (2N1770A-2N1777A) (Pub. #150.20)—T_J = 150°C, up to 400V PRV
(JAN Types 2N1770A-2N1777A to MIL-S-19500/168B also available)

C11 (2N1770-2N1778, 2N2619) (Pub. #150.21)—T_J = 125°C, up to 600V PRV

MAXIMUM ALLOWABLE RATINGS

TYPE	PEAK FORWARD BLOCKING VOLTAGE, V_{FOM} T_C = −65°C to +105°C	PEAK FORWARD VOLTAGE, FPV T_C = −65°C to +105°C	WORKING AND REPETITIVE PEAK REVERSE VOLTAGE $V_{ROM(WRK)}$ and $V_{ROM(rep)}$ T_C = −65°C to +105°C	NON-REPETITIVE PEAK REVERSE VOLTAGE $V_{ROM(non-rep)}$ (≤5 Milliseconds) T_C = −65°C to +105°C
C15U	25 volts	480 volts	25 volts	40 volts
C15F	50 volts	480 volts	50 volts	75 volts
C15A	100 volts	480 volts	100 volts	150 volts
C15G	150 volts	480 volts	150 volts	220 volts
C15B	200 volts	480 volts	200 volts	300 volts
C15C	300 volts	480 volts	300 volts	400 volts
C15D	400 volts	480 volts	400 volts	500 volts
C15E	500 volts	600 volts	500 volts	600 volts
C15M	600 volts	720 volts	600 volts	720 volts

CHARACTERISTICS

TEST	SYMBOL	MIN.	MAX.	UNITS	TEST CONDITIONS
PEAK REVERSE OR FORWARD BLOCKING CURRENT[a]	I_{ROM} or I_{FOM}			mA	T_C = −65°C to +105°C
C15U		—	9.0		$V_{ROM} = V_{FOM}$ = 25V Peak
C15F		—	9.0		$V_{ROM} = V_{FOM}$ = 50V Peak
C15A		—	9.0		$V_{ROM} = V_{FOM}$ = 100V Peak
C15G		—	8.0		$V_{ROM} = V_{FOM}$ = 150V Peak
C15B		—	6.0		$V_{ROM} = V_{FOM}$ = 200V Peak
C15C		—	4.0		$V_{ROM} = V_{FOM}$ = 300V Peak
C15D		—	2.0		$V_{ROM} = V_{FOM}$ = 400V Peak
C15E		—	2.0		$V_{ROM} = V_{FOM}$ = 500V Peak
C15M		—	2.0		$V_{ROM} = V_{FOM}$ = 600V Peak
GATE TRIGGER CURRENT	I_{GT}	—	25	mAdc	T_C = +25°C, V_{FX} = 6 Vdc, R_L = 125 ohms
		—	50	mAdc	T_C = −65°C, V_{FX} = 6 Vdc, R_L = 125 ohms
GATE TRIGGER VOLTAGE	V_{GT}	—	2.5	Vdc	T_C = −65°C to +105° C, V_{FX} = 6 Vdc, R_L = 125 ohms
		0.3	—	Vdc	T_C = +105°C, V_{FXM} = Rated V_{FOM}, R_L = 250 ohms
PEAK ON-VOLTAGE	V_{FM}	—	1.85	V	T_C = +25°C, I_{FM} = 15A Peak, 1 millisecond wide pulse. Duty cycle ≦ 1%.
HOLDING CURRENT	I_{HO}	—	30	mA	T_C = +25°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.

[a]Values apply for zero or negative gate voltage only. Maximum case to ambient thermal resistance for which maximum V_{FOM} and V_{ROM} ratings apply equals 18°C/watt.

EDITOR

8001-4234