NTE56014
TRIAC, 25 Amp
TO3 Isolated Flange

Absolute Maximum Ratings and Electrical Characteristics:

Peak Repetitive Off−State Voltage, (Gate Open, T_J = +110°C, Note 1), V_{DRM} 400V

RMS On−State Current (T_C = +80°C, Conduction Angle of 360°), I_T(rms) 25A

Peak Surge (Non−Repetitive) On−State Current (One Cycle, 50Hz or 60Hz), I_{TSM} 250A

Peak Gate Trigger Current (3μs Max), I_{GTM} 4A

Peak Gate Power Dissipation ($I_{GT} ≤ I_{GTM}$), P_{GM} 40W

Average Gate Power Dissipation, $P_{G(AV)}$ 0.8W

Operating Junction Temperature Range, T_J . . . . −40° to +110°C

Storage Temperature Range, T_{stg} . . . . −40° to +150°C

Typical Thermal Resistance, Junction−to−Case, R_{thJC} . . . . 1.3°C/W

Note 1. All values apply in either direction.

Electrical Characteristics:

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Peak Off−State Current	I_{DRM}	V_{DRM} = 400V, T_C = +110°C, Gate Open, Note 1	–	–	1	mA
Maximum On−State Voltage	V_{TM}	I_T = 25A, T_C = +25°C, Note 1	–	–	1.8	V
DC Holding Current	I_{HO}	T_C = +25°C, Gate Open, Note 1	–	–	80	mA
Critical Rate−of−Rise of Off−State Voltage	Critical dv/dt	V_D = 400V, T_C = +110°C, Gate Open, Note 1	–	200	–	V/μs
Critical Rate−of−Rise of Commutating Voltage	Commutating dv/dt	V_D = 400V, I_T = 25A, T_C = +80°C, Gate Unenergized, Note 1	–	5	–	V/μs
DC Gate Trigger Current MT2 (+) G (+), MT2 (–) G (–)	I_{GT}	V_D = 12V, R_L = 60Ω, T_C = +25°C	–	–	100	mA
MT2 (+) G (–), MT2 (–) G (+)			–	–	150	mA
DC Gate Trigger Voltage	V_{GT}	V_D = 12V, R_L = 30Ω, T_C = +25°C	–	–	2.5	V
Gate Controlled Turn−On Time	t_{gt}	V_D = 400V, I_{GT} = 200mA, t_r = 0.1μs, I_T = 10A Peak, T_C = +25°C	–	3	–	μs

Note 1. All values apply in either direction.

1.197 (30.4) Max

.255 (6.48) Max

.161 (4.08) Max

.500 (12.7) Max

MT2

1.050 (26.67)

40° Max

MT1

Gate

35° Max

.880 (22.35) Max

1.460 (37.08) Max

1.075 (27.3) Max

.131 (3.32) Max

1.550 (39.37) Max