



8A SCRs

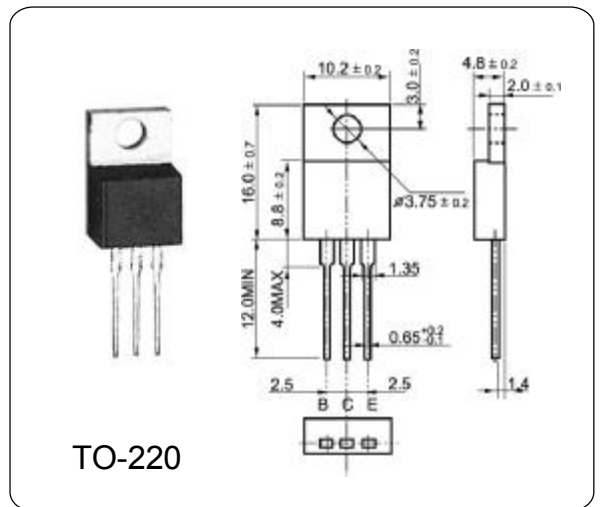
TS820-600T

GENERAL DESCRIPTION

Available either in sensitive (TS8) gate triggering levels, the 8A SCR series is suitable to fit all modes of control, found in applications such as overvoltage crowbar protection, motor control circuits in power tools and kitchen aids, inrush current limiting circuits, capacitive discharge ignition and voltage regulation circuits... Available in through-hole or surface-mount packages, they provide an optimized performance in a limited space area.

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

PARAMETER	Symbol	Value	Unit
Repetitive peak off-state voltages	V_{DRM}	600	V
peak off-state reverse voltages	V_{RRM}	600	V
RMS on-state current	I_T	8.0	A
Non-repetitive peak on-state current	I_{TSM}	73	A
Max. Operating Junction Temperature	T_j	110	°C
Storage Temperature	T_{stg}	-45~150	°C



ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Repetitive peak off-state voltages	V_{DRM} V_{RRM}		—	600	—	V
Average on-state current	$I_{T(AV)}$	half sine wave; $T_{mb} < 110\text{ °C}$	—	5.0	—	A
RMS on-state current	$I_{T(RMS)}$	all conduction angles	—	8.0	—	A
On-state voltage	V_{TM}	$I_T = 16A$	—	—	1.60	V
Holding current	I_H	$I_T = 50\text{ mA}$ $R_{GK} = 1\text{ k}\Omega$	—	—	5.0	mA
Latching current	I_L	$I_T = 50\text{ mA}$ $R_{GK} = 1\text{ k}\Omega$	—	—	6.0	mA
Gate trigger current	I_{GT}	$V_D = 12\text{ V}$ $R_L = 140\ \Omega$	—	—	200	uA
Gate trigger voltage	V_{GT}	$V_D = 12\text{ V}$ $R_L = 140\ \Omega$	—	—	0.8	V