

PHASE CONTROL SCRS 1250 TO 1570 AMPERES

TYPE		C390X500	C440	C702	C703		
Voltage Range		100-600	500-1300	2000-3200	2000-2800		
IT (RMS)	Max. RMS on-state current (A)	1300	1400	1570	1570		
IT(AV)	Max. average on-state current @180°C conduction (A)@Tc 70°	800	850 @a 75°C	1050	1050		
IT(AV)	Max. average on-state current for 3 Ø conduction (A) @ Tc @ 80°C	500 @ 72°C	650	1040	925 @70°C		
ITSM	Max. peak one-cycle, 50HZ non-repetitive surge current (A) 60HZ	9.500	12,000	14,000	14,000		
		10,000	13,000	15,000	15,000		
I ² t	Max. I ² t for fusing 1.5 msec (A ² sec)	415,000	700,000	600,000	575,000		
VTM	on-state voltage @ 25°C,180° conduction, rated IT(AV) (V)	1.9	1.6	2.0	2.3		
RθJC	Max. thermal resistance, dc, junction-to-case (°C/W)	.06	.04	.023	.023		
tq	Typical turn-off time (µsec) @ Max. Tj	125	125	125	125		
di/dt	Rate-of-rise of on current (A/us)	500	800	100	200		
Tj	Operating junction temperature (°C)	-40 to 125	-40 to 125	-40 to 125	-40 to 125		
QRR	Max. reverse recovered charge (µC) Tj =25°C	-	-	-	-		
dV/dt	Max. critical rate-of-rise of off-state voltage @ max. rated Tj (V/µs)	200	200	200	500		
IGT	Gate current to trigger @ -40°C (mA) @ + 25°C (mA)	400	300	-	-		
		150	150	200	200		
VGT	Max. required gate voltage to trigger (V) (-40 to + 125 °C)	5	5	4.5	3.5		
VF	Peak on-state Voltage @ the following parameters	IMIN(A)	200	80	300	300	
		IMAX(A)	7000	10,000	10,000	10,000	
		A	2.09	.69	-1.43	-0.085	
		B	-.39	-.025	.5	.22	
		C	-.00009	.0002	.0005	.0005	
RθJC	Transient thermal resistance @ the following parameters	D	.59	.012	-.33	-.013	
		TMIN(S)	.001	.001	.01	.01	
		TMAX(S)	.01	.01	.1	.1	
		F	.243	.81	.017	.017	
		G	.577	.48	.426	.426	
Package Outline.		TO-200AC	TO-200AC	Modified TO-200AC	DISC		
Maximum Stud Torque (In-Lbs/N-M)		-	-	-	-		
Max. Mounting Force	Lbs	2000	3000	6000	6000		
	KN	8.9	13.3	26.6	26.6		