

PHASE CONTROL SCRS 2400 TO 3900 AMPERES

TYPE		C450-1	-	C782	C781		
Voltage Range		500-1400		2000-2400	1500-2000		
IT (RMS)	Max. RMS on-state current (A)	2400		3000	3900		
IT(AV)	Max. average on-state current @180°C conduction (A)@Tc 70°	1510		2200	2500		
IT(AV)	Max. average on-state current for 3 Ø conduction (A) @ Tc 70°C	1250		1933	2300		
ITSM	Max. peak one-cycle, 50HZ non-repetitive surge current (A) 60HZ	25,000		28,500	39,600		
		28,500		31,500	44,000		
I ² t	Max. I ² t for fusing 1.5 msec (A ² sec)	1,250,000		1.2X10 ⁶	2X10 ⁶		
VTM	on-state voltage @ 25°C,180° conduction, rated IT(AV) (V)	1.65		1.43	1.2 @2KA		
RθJC	Max. thermal resistance, dc, junction-to-case (°C/W)	.025		.012	.012		
tq	Typical turn-off time (µsec) @ Max. Tj	150		200	120		
di/dt	Rate-of-rise of on current (A/us)	400		150	150		
Tj	Operating junction temperature (°C)	-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 0.8VDRM @ max. rated Tj (V/µs)	400		300	500		
IGT	Gate current to trigger @ -40°C (mA) @ + 25°C (mA)	300		-	-		
		200		200	300		
VGT	Max. required gate voltage to trigger (V) (-40 to + 125 °C)	5		4.5	4.5		
VF	Peak on-state Voltage @ the following parameters	IMIN(A)	1000		300	4000	
		IMAX(A)	20,000		10,000	56,000	
		A	-1.3		-1.59	-8.03	
		B	.405		.527	1.59	
		C	.0002		3.2X10 ⁻³	.0004	
RθJC	Transient thermal resistance @ the following parameters	D	-.022		-.0365	-.08	
		TMIN(S)	.001		-	-	
		TMAX(S)	.01		-	-	
		F	0.055		-	-	
		G	.63		-	-	
Package Outline.		Modified TO200AC		DISC	DISC		
Maximum Stud Torque (In-Lbs/N-M)		-		-	-		
Max. Mounting Force	Lbs	5500		7000	7000		
	KN	24.5		31.4	31.4		