

PHASE CONTROL SCRS 1000 TO 1250 AMPERES

TYPE		C430	C430X555	C441	C430X500	C430X550	
Voltage Range		500-1400	500-1200	1300-1800	100-600	100-400	
IT (RMS)	Max. RMS on-state current (A)	1000	1000	1100	1200	1250	
IT(AV)	Max. average on-state current @180°C conduction (A)@Tc	700 @ 65°C	700 @ 75°C	800 @ 65°C	700 @ 76°C	700 @ 100°C	
IT(AV)	Max. average on-state current for 3 Ø conduction (A) @ Tc @ 80°C	550 @ 65°C	-	575 @ 80°C	-	-	
ITSM	Max. peak one-cycle, 50HZ non-repetitive surge current (A) 60HZ	7600	-	-	-	-	
		8000	8000	11000	11000	9000	
I ² t	Max. I ² t for fusing 1.5 msec (A ² sec)	100,00	265,000	500,000	415,000	335,000	
VTM	on-state voltage @ 25°C,180° conduction, rated IT(AV) (V)	2.15	2.4	1.8	1.9	1.9	
RθJC	Max. thermal resistance, dc, junction-to-case (°C/W)	.045	.045	.04	.045	.045	
tq	Typical turn-off time (µsec) @ Max. Tj	125	150	125	125	125	
di/dt	Rate-of-rise of on current (A/us)	500	500	150	500	500	
Tj	Operating junction temperature (°C)	-40 to 125	-40 to 150	-40 to 125	-40 to 125	-40 TO 150	
QRR	Max. reverse recovered charge (µC) Tj =25°C	250	250	700	-	-	
DV/dt	Max. critical rate-of-rise of off-state voltage @ max. rated Tj (V/µs)	200	100	200	200	100	
IGT	Gate current to trigger @ -40°C (mA) @ + 25°C (mA)	300	400	300	300	400	
		150	200	150	150	200	
VGT	Max. required gate voltage to trigger (V) (-40 to + 125 °C)	5.0	5	5.0	5	5	
VF	Peak on-state Voltage @ the following parameters	IMIN(A)	300	100	1	200	200
		IMAX(A)	5000	6000	5000	7000	6000
		A	-.578	-5.7	.578	-2.04	.193
		B	1.86	1.867	.009	.69	.077
		C	.003	.002	.0001	.0006	.0002
RθJC	Transient thermal resistance @ the following parameters	D	-.25	X.22	.02	-.06	-.0077
		TMIN(S)	.001	.001	.001	.001	.001
		TMAX(S)	.01	.01	.01	.01	.01
		F	.889	.16	89.37	.118	.174
		G	.824	.363	1.49	.865	.92
Package Outline.		TO200AB2	TO200AB2	TO-200AC	TO200AB2	TO200AB2	
Maximum Stud Torque (In-Lbs/N-M)		-	-	-	-		
Max. Mounting Force	Lbs	2500	2500	3500	2500	2500	
	KN	11.1	11.1	15.1	11.1	11.1	