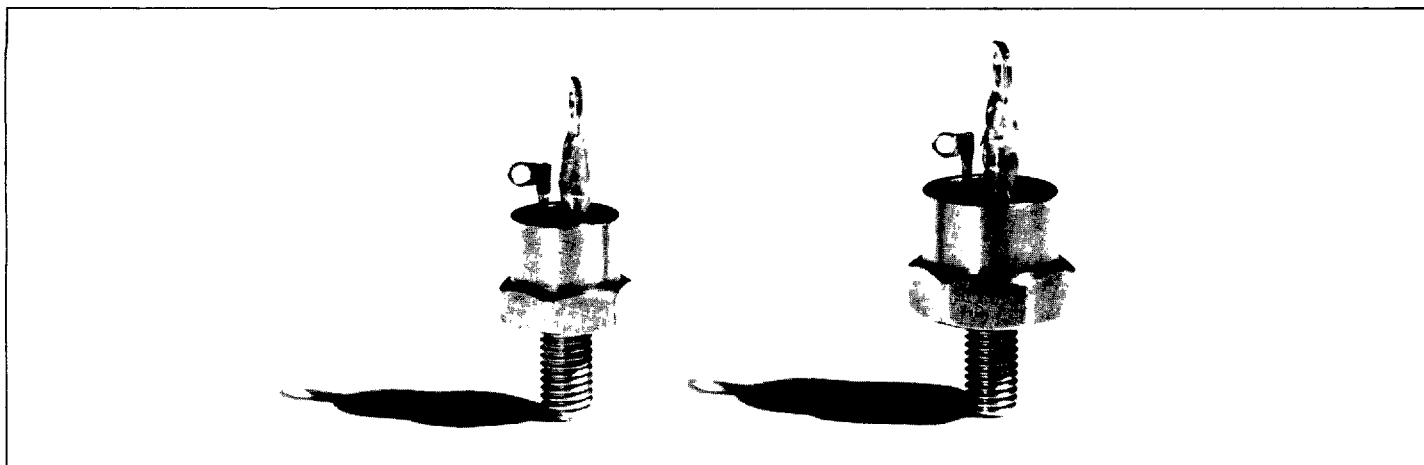


INVERTER SCRs



NATIONAL TYPE NO.	C138	C139	C140	C141	C144	C148	C149
VOLTAGE RANGE	500-800	500-800	100-400	100-400	500-800	600-1200	100-600
I_{TM} Peak on-state sinusoidal current @ T _c = 65°C, 50% duty (A)	—	—	—	—	—	—	—
@ 1 KHz	55	55	55	55	55	125	125
@ 5 KHz	35	35	35	35	35	110	125
@ 10 KHz	23	23	23	23	23	38	80
I_{TSM} Peak one cycle surge current (A)	200	200	200	200	200	700	1000
I²t For fusing at 8.3 msec (A ² sec)	165	165	165	165	165	2000	4150
V_{TM} Max. peak on-state volts @ peak amps., T _J = 25°C	4.0 @ 100	4.0 @ 100	2.0 @ 25	2.0 @ 25	3.0 @ 100	4.0 @ 500	3.0 @ 500
di/dt Max. Rate-of-rise of on-state current (A/μsec)	100	100	400	400	100	100	100
dv/dt Min. Rate-of-rise off-state voltage (V/μsec)	200	200	200	200	200	200	200
t_o Turn-off time at rated voltage and T _J , with 200 v/μsec reapplied	10/20	10/20	15	10	15	30	10/20
I_{GT} Max. gate trigger current (MA) @ 25°C	180	180	180	180	150	150	150
V_{GT} Max. gate trigger voltage (V) @ 25°C	3.0	3.0	3.0	3.0	3.0	3.0	3.0
R_{θJC} Max. thermal resistance junction-to-case (°C/W)	1.0	1.0	1.0	1.0	1.0	.35	.35
T_J Max. junction operating temperature (°C)	125	125	125	125	125	125	125
	100	A		C140A	C141A		C149A
	150	G					C149G
REPETITIVE PEAK FORWARD (V _{DRM})	200	B		C140B	C141B		C149B
	250	H					
	300	C		C140C	C141C		C149C
	400	D		C140D	C141D		C149D
	500	E	C138E	C139E		C144E	C149E
AND	600	M	C138M	C139M		C144M	C148M
	700	S	C138S	C139S		C144S	C148S
REPETITIVE PEAK REVERSE (V _{RRM}) VOLTAGE	800	N	C138N	C139N		C144N	C148N
	900	T					C148T
	1000	P					C148P
	1100	PA					C148PA
	1200	PB					C148PB
	1300	PC					
	1400	PD					
Stud Torque (in-lbs)	30	30	30	30	30	30	30
Package Type	1/4" stud	1/4" stud	1/4" stud	1/4" stud	1/4" stud	1/4" stud	1/4" stud
Package Outline Number	TO-48	TO-48	TO-48	TO-48	TO-48	TO-65	TO-65