

# Inverter Grade SCRs

$I_{T(RMS)}$ $T_c=65^\circ\text{C}$ 50% Duty Cycle, Half Sine 1KHz (Amps)	$I_{TSM}$ (Amps)		$I_{DRM}/I_{RRM}$ @ Rated $V_{DRM}/V_{RRM}$ and $T_{J(Max)}$ (mA)	$I^2t$ for Fusing @ 8.3 ms (A <sup>2</sup> sec)	$V_{DRM}/V_{RRM}$ Range (Volts)	$V_{TM}$ @ $I_{TM}$ $T_J=25^\circ\text{C}$		Chip Size (mm)	Junction Temp. Range (°C)	$R_{\theta JC}$ (°C/W)	$t_{q(Max)}$ @ $T_{J(Max)}$ (μsec)
	50 Hz	60 Hz				$I_{TM}$ (Amps)	$V_{TM}$ (Volts)				
27	165	180	4-6	134	50-400	25	2.05	—	-65 to 120	1.7	15
27	165	180	4-6	134	50-400	25	2.05	—	-65 to 120	1.7	10
27	165	180	4-6	134	50-400	25	2.05	—	-65 to 120	1.7	15
27	165	180	4-6	134	50-400	25	2.05	—	-65 to 120	1.7	10
70	670	700	12	2634	500-1200	500	4	12	-40 to 125	.35	$\frac{30}{40}$
70	920	1000	12	4150	100-600	500	3	12	-40 to 125	.35	$\frac{10}{20}$
110	950	1000	15	4000	100-1400	500	4.2	16	-40 to 125	.28	10 to 50
110	920	1000	12	4150	100-600	500	3	12	-40 to 125	.35	$\frac{10}{20}$
110	920	1000	12	4150	100-600	500	3	12	-40 to 125	.35	$\frac{10}{20}$
110	1500	1600	15-18	10,624	500-1400	500	3.5	18	-40 to 125	.3	40
110	1500	1600	15-18	10,624	500-1400	500	3.5	18	-40 to 125	.3	40
110	1700	1800	17	13,446	100-600	500	2.6	18	-40 to 125	.3	10
110	1700	1800	17	13,446	100-600	500	2.6	18	-40 to 125	.3	10
110	1700	1800	17	13,446	100-800	500	2.6	18	-40 to 125	.3	20
110	1700	1800	17	13,446	100-600	500	2.6	18	-40 to 125	.3	20
110	1700	1800	17	13,446	100-600	500	3	18	-40 to 125	.3	10
110	1700	1800	17	13,446	100-600	500	3	18	-40 to 125	.3	20
110	1700	1800	17	13,446	100-600	500	3	18	-40 to 125	.3	10
110	1700	1800	17	13,446	100-600	500	3	18	-40 to 125	.3	20
115	1090	1200	15	6000	100-1400	500	3.5	16	-40 to 125	.28	10 to 50
120	1330	1400	15	8150	100-1400	500	3.2	16	-40 to 125	.28	10 to 50
250	3200	3500	20	50,836	100-800	1500	2.85	22	-40 to 125	.15	10

\* = 25°C Value

$Q_{rr}(\text{Max})$ @ $T_J=25^\circ\text{C}$ ( $\mu\text{Coul}$ )	Min $dI/dt$ Repetitive on-State (A/ $\mu\text{sec}$ )	Min Critical $dV/dt$ @ $T_J(\text{Max})$ (V/ $\mu\text{sec}$ )	Max VGT (V)	Max IGT (mA)	PACKAGE INFORMATION			
					Max Mounting Force or Torque	STYLE	Outline	TYPE NO.
—	400	200	4.5	500	$\frac{30 \text{ lb-in}}{35 \text{ kg-cm}}$	1/4-28 Stud	TO-48	C140
—	400	200	4.5	500	$\frac{30 \text{ lb-in}}{35 \text{ kg-cm}}$	1/4-28 Stud	TO-48	C141
—	400	200	4.5	500	$\frac{30 \text{ lb-in}}{35 \text{ kg-cm}}$	1/4-28 Stud	TO-48	2N3649-3653
—	400	200	4.5	500	$\frac{30 \text{ lb-in}}{35 \text{ kg-cm}}$	1/4-28 Stud	TO-48	2N3654-3658
1	75	200	3.5	300	$\frac{30 \text{ lb-in}}{35 \text{ kg-cm}}$	1/4-28 Stud	Modified TO-65	C148
4	100	200	3.5	300	$\frac{30 \text{ lb-in}}{35 \text{ kg-cm}}$	1/4-28 Stud	Modified TO-65	C149
—	100	200	3*	150*	$\frac{130 \text{ lb-in}}{152 \text{ kg-cm}}$	1/2-20 Stud	TO-83 TO-94	T507 __ 40
4	100	200	3.5	300	$\frac{130 \text{ lb-in}}{152 \text{ kg-cm}}$	1/2-20 Stud	TO-94	C49
4	100	200	3.5	300	$\frac{130 \text{ lb-in}}{152 \text{ kg-cm}}$	1/2-20 Stud	TO-83	C49X2
25	500	200	3	300	$\frac{150 \text{ lb-in}}{175 \text{ kg-cm}}$	1/2-20 Stud	Modified TO-94	C158
25	500	200	3	300	$\frac{150 \text{ lb-in}}{175 \text{ kg-cm}}$	1/2-20 Stud	Modified TO-83	C159
15	500	200	3	400	$\frac{150 \text{ lb-in}}{175 \text{ kg-cm}}$	1/2-20 Stud	Modified TO-94	C164
15	500	200	3	400	$\frac{150 \text{ lb-in}}{175 \text{ kg-cm}}$	1/2-20 Stud	Modified TO-83	C164-2
15	500	200	3	400	$\frac{150 \text{ lb-in}}{175 \text{ kg-cm}}$	1/2-20 Stud	Modified TO-94	C165
15	500	200	3	400	$\frac{150 \text{ lb-in}}{175 \text{ kg-cm}}$	1/2-20 Stud	Modified TO-83	C165-2
—	500	200	5	200	$\frac{150 \text{ lb-in}}{175 \text{ kg-cm}}$	1/2-20 Stud	Modified TO-94	C154
—	500	200	5	200	$\frac{150 \text{ lb-in}}{175 \text{ kg-cm}}$	1/2-20 Stud	Modified TO-94	C155
—	500	200	5	200	$\frac{150 \text{ lb-in}}{175 \text{ kg-cm}}$	1/2-20 Stud	Modified TO-83	C156
—	500	200	5	200	$\frac{150 \text{ lb-in}}{175 \text{ kg-cm}}$	1/2-20 Stud	Modified TO-83	C157
—	100	200	3*	150*	$\frac{130 \text{ lb-in}}{152 \text{ kg-cm}}$	1/2-20 Stud	TO-83 TO-94	T507 __ 70
—	150	200	3*	150*	$\frac{130 \text{ lb-in}}{152 \text{ kg-cm}}$	1/2-20 Stud	TO-83 TO-94	T507 __ 80
25	500	200	5	500	$\frac{300 \text{ lb-in}}{348 \text{ kg-cm}}$	3/4-16 Stud	TO-93	C184



JEDEC TO-48



Modified TO-65