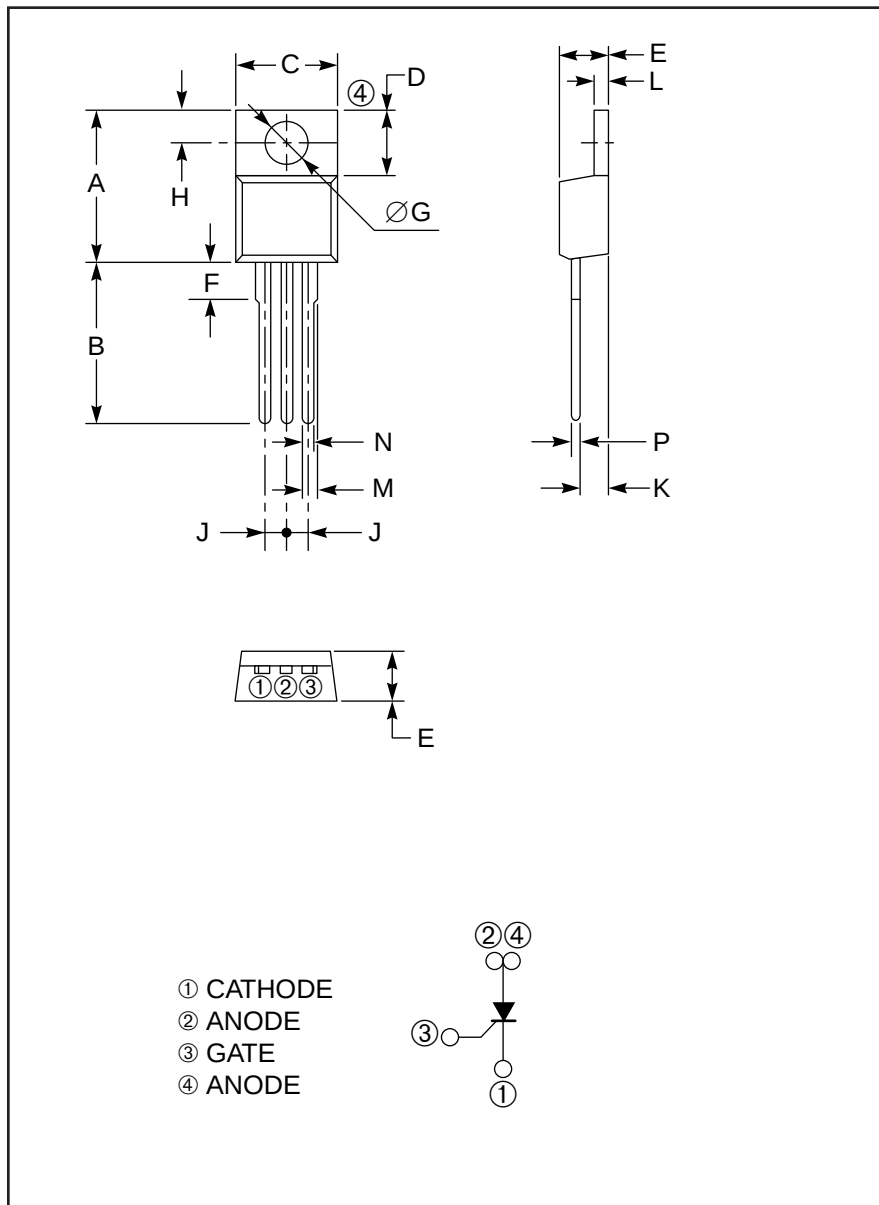


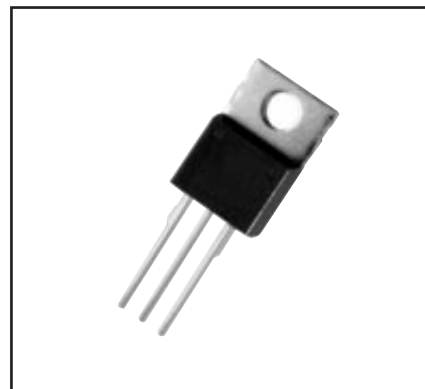
Inverter SCR for Strobe Flasher Applications 0.8 Amperes/400 Volts



Outline Drawing (Conforms to TO-220)

Dimensions	Inches	Millimeters
A	0.63 Max.	16 Max.
B	0.49 Min.	12.5 Min.
C	0.41 Max.	10.5 Max.
D	0.28	7.0
E	0.18	4.5
F	0.15 Max.	3.8 Max.
G	0.142 ± 0.008 Dia.	3.6 ± 0.2 Dia.

Dimensions	Inches	Millimeters
H	0.125 ± 0.008	3.2 ± 0.2
J	0.99	2.54
K	0.10	2.6
L	0.051	1.3
M	0.051	1.3
N	0.031	0.8
P	0.020	0.5



Description:

The Powerex CR3JM is a glass passivated and molded silicone plastic thyristor for use in automatic strobe flashers.

Features:

- ☐ Large Pulse
- ☐ Glass Passivation
- ☐ Short Turn-off Time
- ☐ Easy Application for Printed Circuits

Applications:

- ☐ Strobe Flasher

Ordering Information:

Example: Select the complete six digit part number you desire from the table - i.e. CR3JM-8 is a 400 Volt, 0.8 Ampere Average SCR.

Type	V _{DRM} /V _{RRM} Volts	Code	Current Rating, I _{T(avg)} Amperes (0.8)
CR3JM	400	-8	—

CR3JM
Inverter SCR
for Strobe Flasher Applications
0.8 Amperes/400 Volts

Absolute Maximum Ratings, $T_a = 25^\circ\text{C}$ unless otherwise specified

Ratings	Symbol	CR3JM-8	Units
Repetitive Peak Off-state Voltage	V_{DRM}	400	Volts
Repetitive Peak Reverse Voltage	V_{RRM}	400	Volts
Non-repetitive Peak Off-state Voltage	V_{DJM}	480	Volts
Non-repetitive Peak Reverse Voltage	V_{RSM}	480	Volts
Average On-state Current (Nominal, See Graphs) $T_a = 37^\circ\text{C}$	$I_{\text{T(avg)}}$	0.8	Amperes
Repetitive Peak On-state Current	I_{TRM}	240	Amperes
Peak Gate Power Dissipation	P_{GM}	3	Watts
Average Gate Power Dissipation	$P_{\text{G(avg)}}$	0.3	Watts
Peak Forward Gate Current	I_{FGM}	1	Amperes
Peak Forward Gate Voltage	V_{FGM}	6	Volts
Peak Reverse Gate Voltage	V_{RGM}	6	Volts
Storage Temperature	$T_{\text{(stg)}}$	-40 to 125	$^\circ\text{C}$
Operating Junction Temperature	T_{j}	-40 to 125	$^\circ\text{C}$
Weight	—	2	Grams

Electrical and Thermal Characteristics

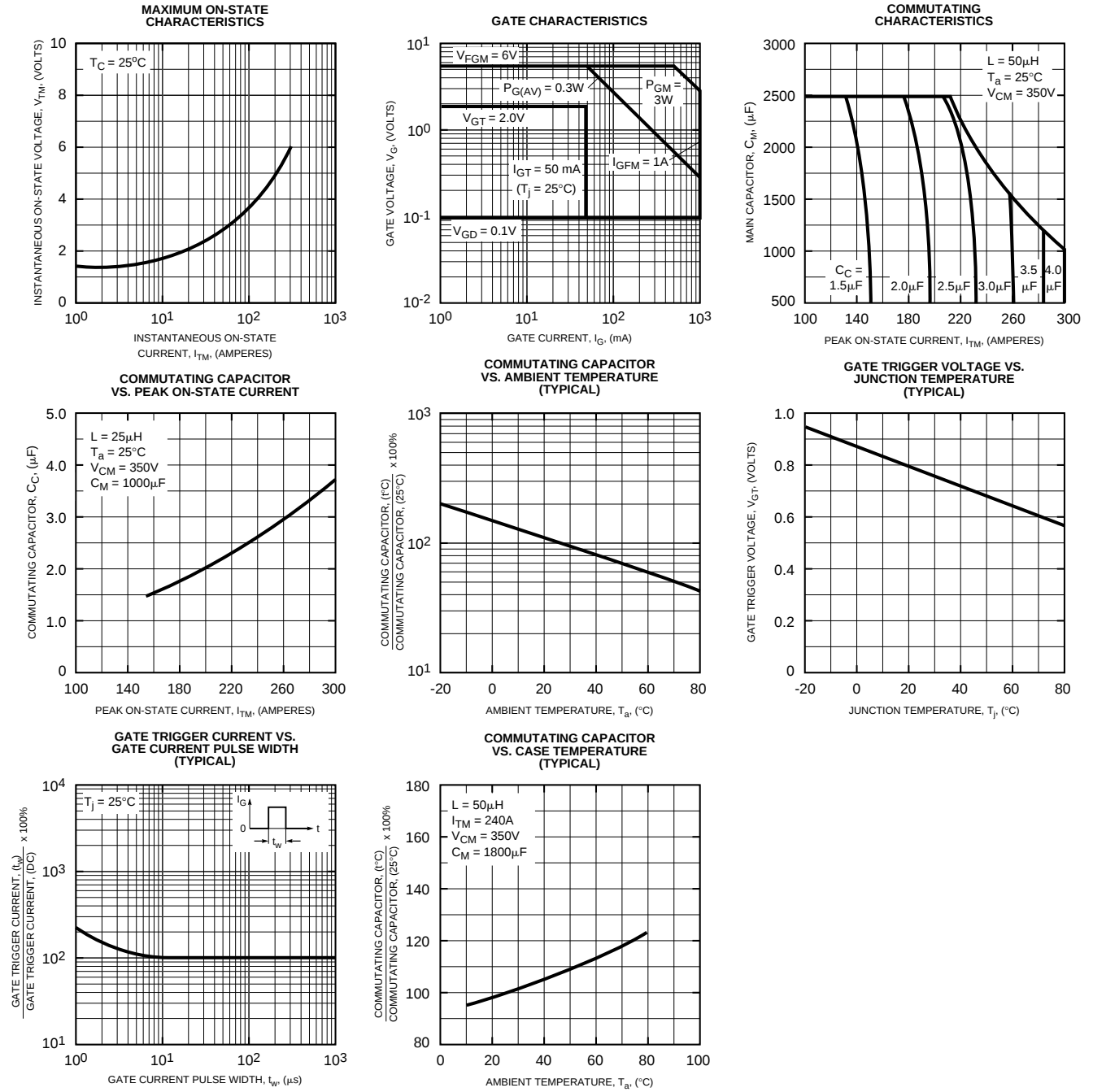
Characteristics	Symbol	Test Conditions	Min.	Typ.	Max.
Units					
Voltage Blocking State					
Peak Forward Leakage	I_{DRM}	$T_{\text{j}} = 25^\circ\text{C}$, $V_{\text{DRM}} = \text{Rated}$	—	—	0.1 mA
Peak Reverse Leakage	I_{RRM}	$T_{\text{j}} = 25^\circ\text{C}$, $V_{\text{RRM}} = \text{Rated}$	—	—	0.1 mA
Current – Conducting State					
Peak On-state Voltage	V_{TM}	$T_{\text{c}} = 25^\circ\text{C}$, $I_{\text{TM}} = 3\text{A Peak}$	—	—	1.8 Volts
Gate – Parameters					
Gate Current to Trigger	I_{GT}	$V_{\text{D}} = 6\text{V}$, $R_{\text{L}} = 6\Omega$, $T_{\text{j}} = 25^\circ\text{C}$	—	—	50 mA
Gate Voltage to Trigger	V_{GT}	$V_{\text{D}} = 6\text{V}$, $R_{\text{L}} = 6\Omega$, $T_{\text{j}} = 25^\circ\text{C}$	—	—	2 Volts
Non-triggering Gate Voltage	V_{GD}	$V_{\text{D}} = 1/2 V_{\text{DRM}}$, $T_{\text{j}} = 125^\circ\text{C}$	0.1	—	— Volts
Commutating Capacitor	C_{C}	$C_{\text{M}} = 1800\mu\text{F}$, $V_{\text{CM}} = 350\text{V}$, $I_{\text{TM}} = 240\text{A}$, $L = 50\mu\text{H}$, $V_{\text{GK}} = -6\text{V}$, $T_{\text{a}} = 25^\circ\text{C}$	—	—	2.8 μF

CR3JM

Inverter SCR

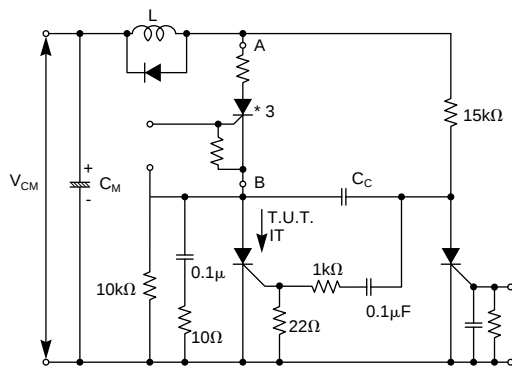
for Strobe Flasher Applications

0.8 Amperes/400 Volts



CR3JM
Inverter SCR
for Strobe Flasher Applications
 0.8 Amperes/400 Volts

TEST CIRCUIT FOR COMMUTATING CAPACITOR



*3 The circuit between A-B is a substitute for Xenon flash tube.