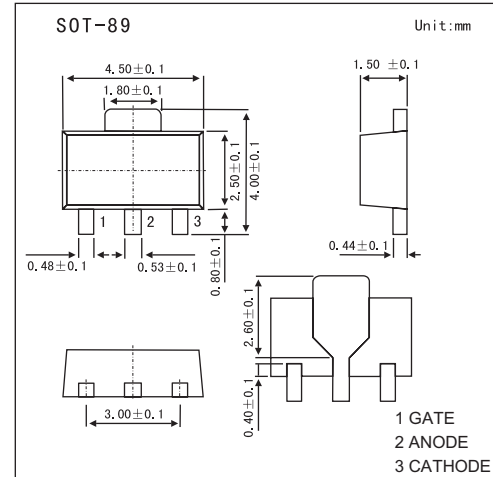


0.47A All Diffused Type SCR Power Mini Mold 03P2J



■ Features

- High Anode to Cathode Voltage: $V_{DRM}:V_{RRM}=200V$

■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage	V_{RSM}	300	V
Non- Repetitive Peak -off Voltage	V_{DSM}	300	V
Repetitive Reverse Voltage	V_{RRM}	200	V
Repetitive Peak-off Voltage	V_{DRM}	200	V
Average On-State Current *1	$I_{T(AV)}$	0.3	A
RMS On-State Current	$I_{T(RSM)}$	0.47	A
Surge On-stage Current	I_{TSM}	6	A
Fusing Current $1ms \leq t \leq 10ms$	$fI_{T^2}dt$	0.15	A^2s
Gate Power Dissipation *2	P_{GM}	0.1	W
Gate Power Dissipation	$P_{G(AV)}$	0.01	W
Gate Forward Current *2	I_{FGM}	0.1	A
Gate Reverse Voltage	V_{RGM}	6	V
Junction Temperature	T_J	-55 to +125	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

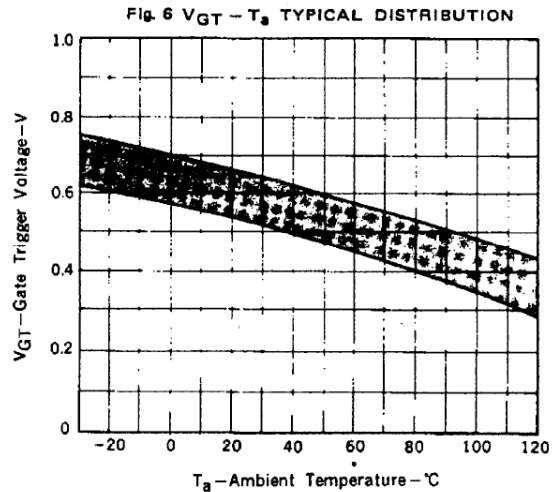
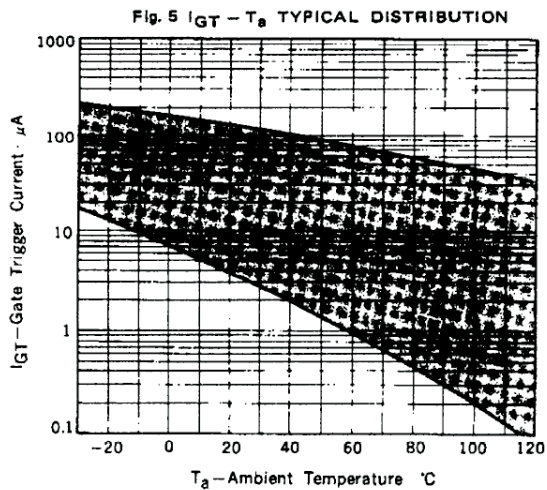
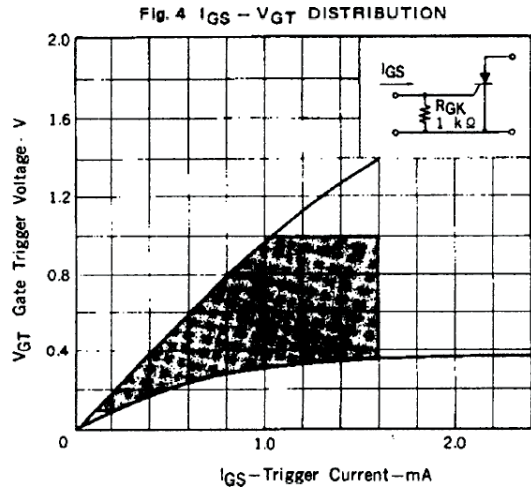
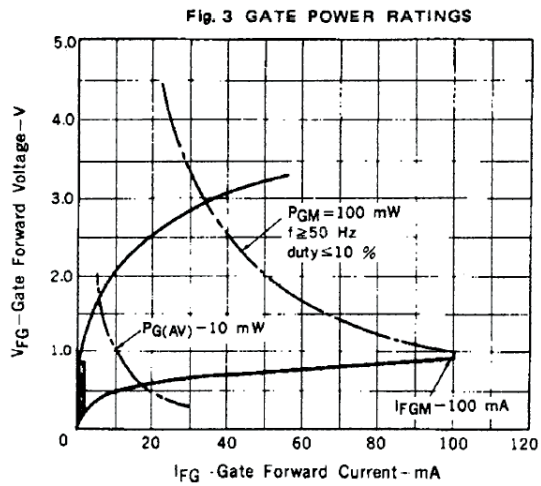
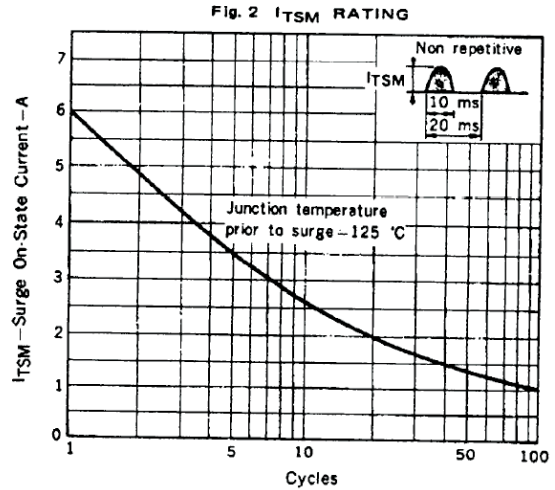
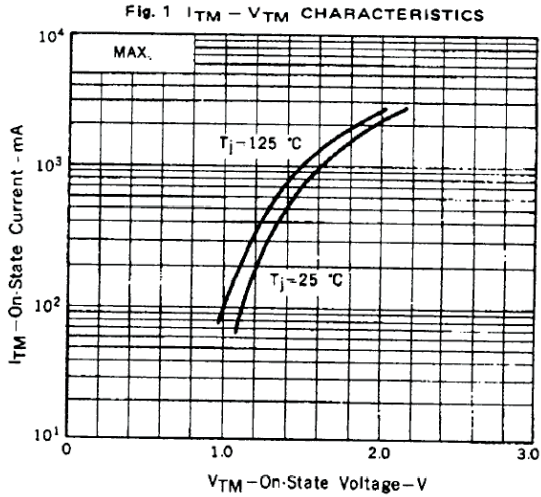
*1 $T_a=77^\circ C$, Single Phase half wave

*2 $f \geq 50Hz$, Duty $\leq 10\%$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditons	Min	Max	Unit
Repetitive Peak Reverse Current	I_{RRM}	$V_{RM}=V_{RRM}, T_J=25^\circ C$		10	μA
		$V_{RM}=V_{RRM}, T_J=125^\circ C$		100	μA
Repetitive Peak Off-state Current	I_{DRM}	$V_{DM}=V_{DRM}, T_J=25^\circ C$		10	μA
		$V_{RM}=V_{RRM}, T_J=125^\circ C$		100	μA
On-state Voltage	V_{TM}	$I_{TM}=1A$		1.6	V
Gate-Trigger Current	I_{GT}	$V_{DM}=6V, R_L=100\Omega$		200	μA
Gate-Trigger Current	V_{GT}	$V_{DM}=6V, R_L=100\Omega$		0.5	V
Gate Non-Trigge Voltage	V_{GD}	$V_{DM}=1/2V_{DRM}, T_J=125^\circ C$	0.1		V
Critical Rate-of-Rise of Off-stage Voltage	dv/dt	$V_{DM}=2/3V_{DRM}, T_J=125^\circ C$		40	$V/\mu s$
Holding Current	I_H	$V_D=24V, I_{TM}=1A$		5	mA
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient		65	$^\circ C/W$

03P2J



HBT169M

Fig. 7 $I_{GS} - \tau_G$ TYPICAL DISTRIBUTION

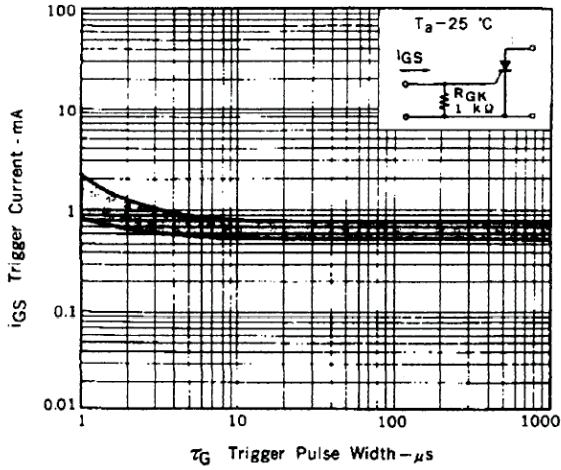


Fig. 8 $V_{GT} - \tau_G$ TYPICAL DISTRIBUTION

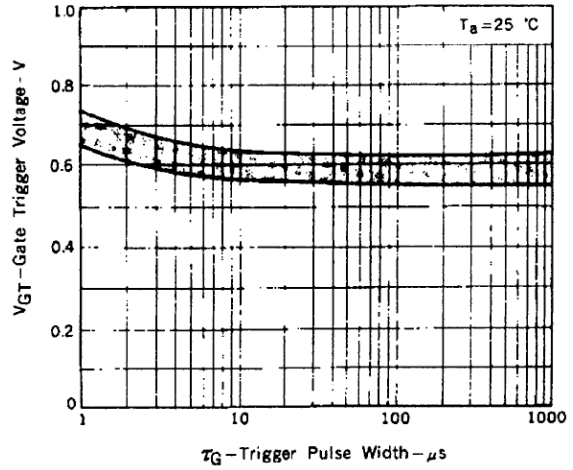


Fig. 9 $P_{T(AV)} - I_{T(AV)}$ CHARACTERISTICS

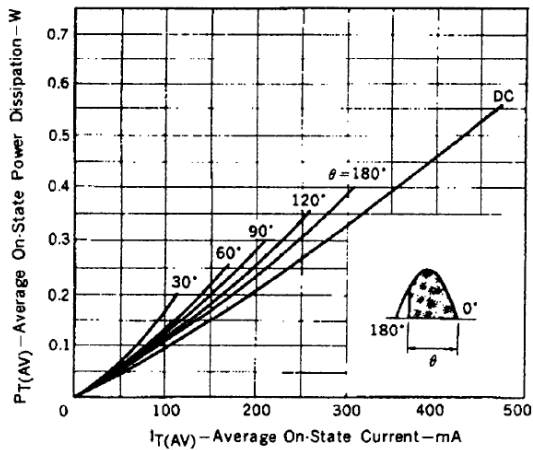


Fig. 10 $I_{T(AV)} - T_a$ RATINGS

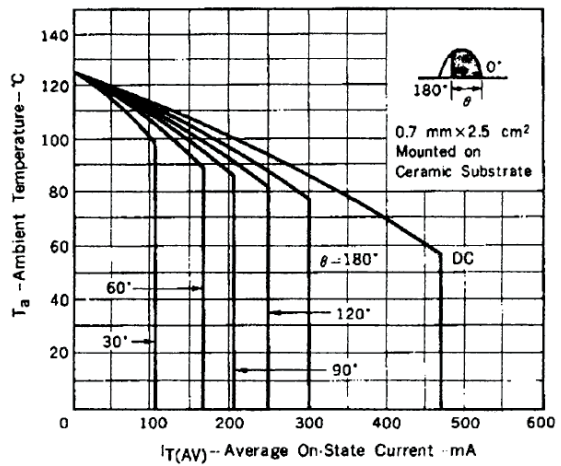


Fig. 11 $I_H - T_a$ TYPICAL DISTRIBUTION

