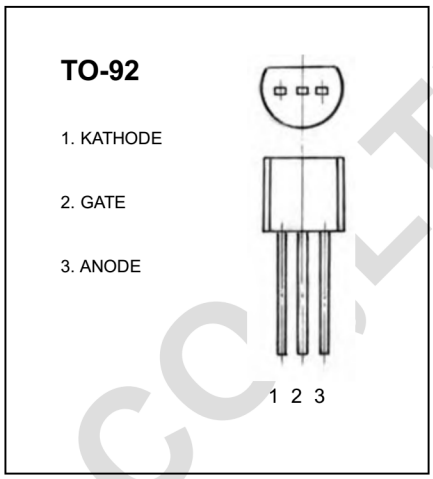
MCR 100- 6, - 8 Silicon Planar PNPN Thyristor



FEATURES

Current-I_{GT}: 200 μA

I_{TRMS}: 0.8 A

V_{DRM}: MCR100-6: 400 V

MCR100-8: 600 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol		Test conditions	MIN	MAX	UNIT
On state voltage *	V_{TM}		I_{TM}=1A		1.7	V
Gate trigger voltage	V_{GT}		V_{AK}=7V		0.8	V
Peak Repetitive forward and reverse blocking voltage **MCR100-6** **MCR100-8**	V_{DRM} AND V_{RRM}		I_{DRM}= 10 μA ,V_{MAX}=1010 V	400 600		V
Peak forward or reverse blocking Current	I_{DRM} I_{RRM}		V_{AK}= Rated V_{DRM} or V_{RRM}		10	μA
Holding current	I_H		I_{HL}= 20 mA , Av = 7 V		5	mA
Gate trigger current	I_{GT}	A2	V_{AK}=7V	5	15	μA
		A1		15	30	μA
		A		30	80	μA
		B		80	200	μA

* Forward current applied for 1 ms maximum duration, duty cycle≤1%.

FIGURE 1 – MCR100-8 CURRENT DERATING
(REFERENCE: CASE TEMPERATURE)

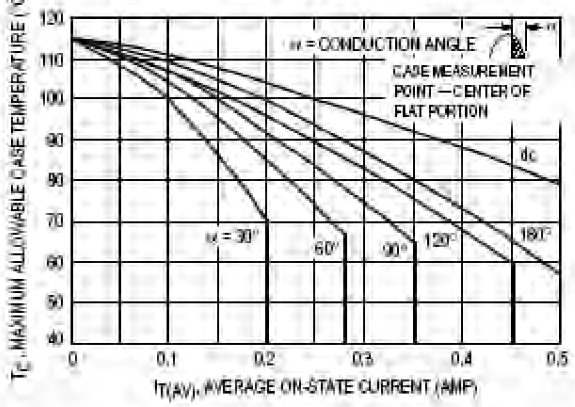


FIGURE 2 – MCR100-8 CURRENT DERATING
(REFERENCE: AMBIENT TEMPERATURE)