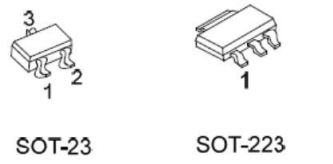
鼎德丰
DING DE FENG

SCR BT169D

FEATURES

- Sensitive Gate Trigger Current
- Low Reverse and Forward Blocking Current
- Low Holding Current
- Glass-Passivated Surface for Reliability and Uniformity



APPLICATIONS

- Ignition circuits
- Lighting ballasts
- Protection circuits
- Switched Mode Power Supplies

SYMBOL

Package	Pin assignment		
	1	2	3
TO-92	K	G	A
SOT-23	K	G	A
SOT-223	K	A	G
SOT-89	K	A	G

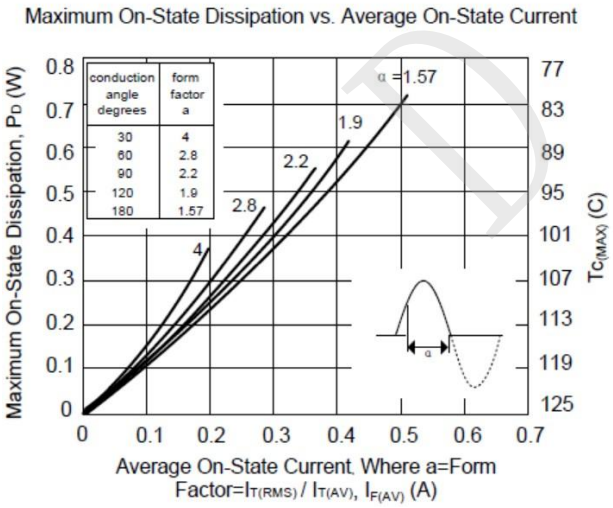
ABSOLUTE MAXIMUM RATINGS

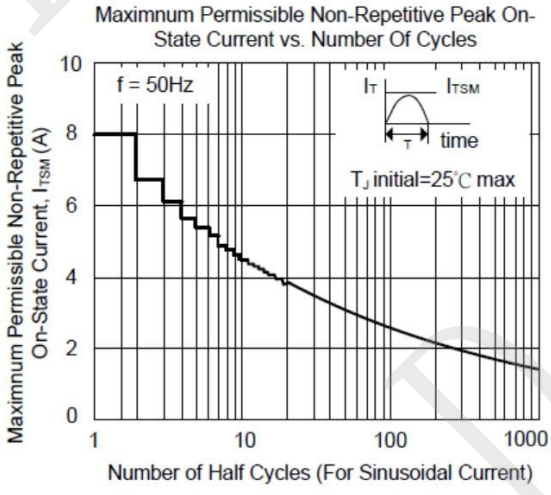
PARAMETER	SYMBOL	VALUE	UNIT
Repetitive Peak Off-State Voltages	V_{DRM} V_{RRM}	600	V
RMS on-State Current	$I_{T(RMS)}$	0.8	A
Non-Repetitive Peak On-State Current	I_{TSM}	8.0	A
Peak gate current	I_{GM}	1.0	A
Peak Gate Power	$P_{G(AV)}$	0.1	W
Peak Gate Voltage	P_{GM}	2	W
Peak Reverse Gate Voltage	V_{RGM}	5	V
Operating junction temperature	T_J	-40~+125	℃
Storage Temperature	T_{STG}	-40~+150	℃

ELECTRICAL CHARACTERISTIC CURVE (TJ=25°C)

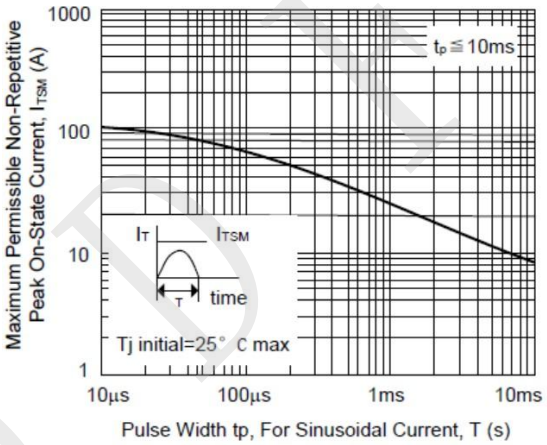
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Peak Repetitive Forward or Reverse Blocking Current	I_{DRM} I_{RRM}	V_{AK} = Rated V_{DRM} or V_{RRM};			100	uA
Gate Trigger Current	I_{GT}	V_D=12V, R_L=100Ω	10		200	uA
Gate Trigger Voltage	V_{GT}	V_D=12V, R_L=100Ω			0.8	V
Peak Forward On-State Voltage	V_{TM}	I_T= 1.0A			1.8	V
Latch Current	I_L	I_G=1.2I_{GT}			6	mA
Holding Current	I_H	I_T=50mA			5	mA
Critical Rate of Rise of Off-State Voltage	dV/dt	V_D=67%V_{DRM}, R_{GK}=1kΩ,	10			V/μs

TYPICAL CHARACTERISTICS

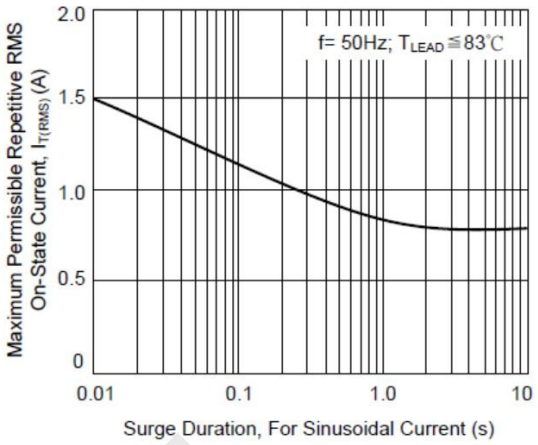




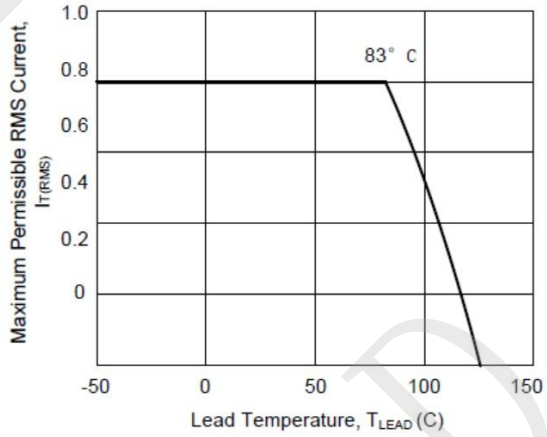
Maximum Permissible Non-Repetitive Peak On-State Current vs. Pulse Width tp, For Sinusoidal Current



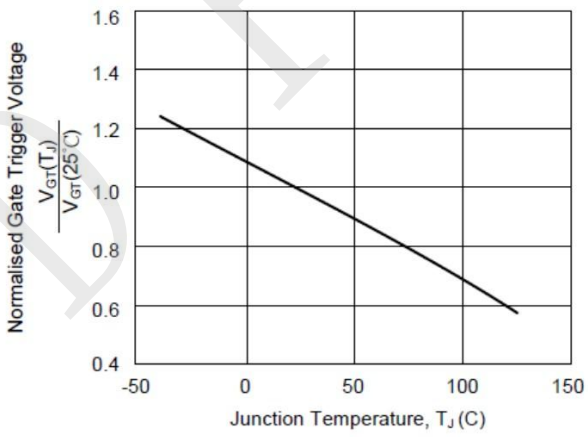
Maximum Permissible Repetitive RMS On-State Current vs. Surge Duration, For Sinusoidal Currents



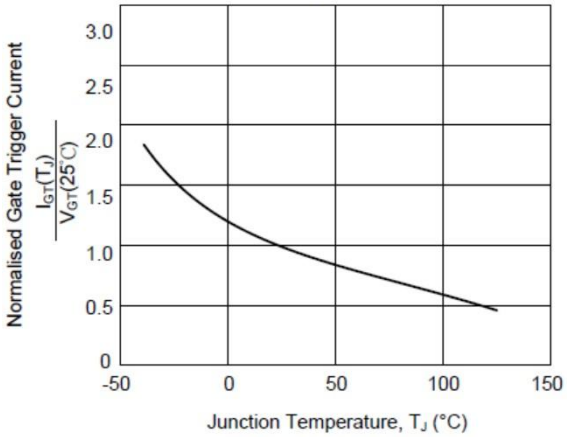
Maximum Permissible RMS Current vs. Lead Temperature



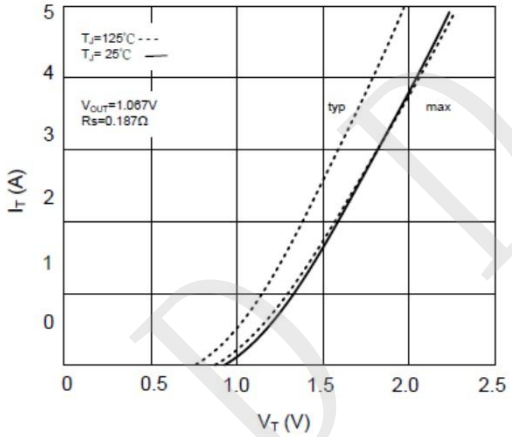
Normalised Gate Trigger Voltage vs. Junction Temperature



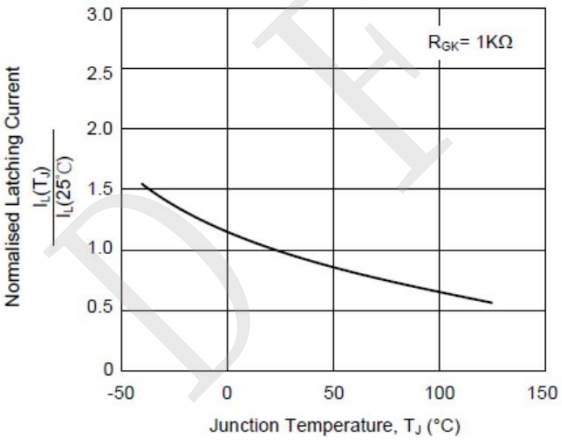
Normalised Gate Trigger Current vs. Junction Temperature



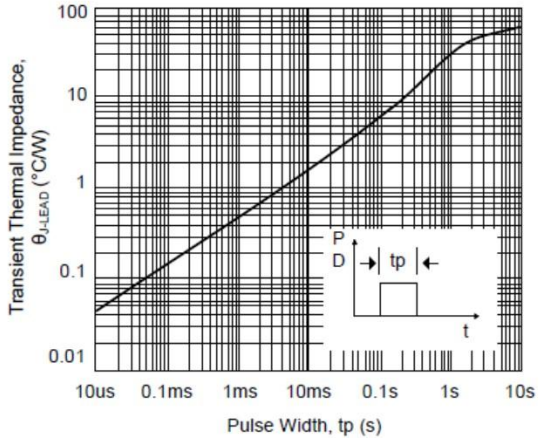
Typical And Maximum On-State Characteristic



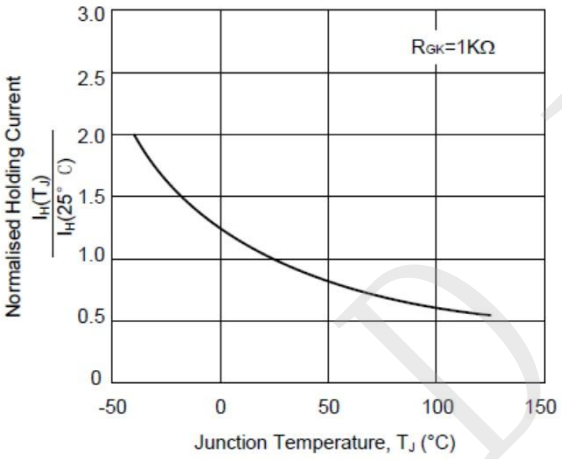
Normalised Latching Current vs. Junction Temperature



Transient Thermal Impedance vs. Pulse Width



Normalised Holding Current vs. Junction Temperature



Typical, Critical Rate Of Rise Of Off-State Voltage vs. Junction Temperature