

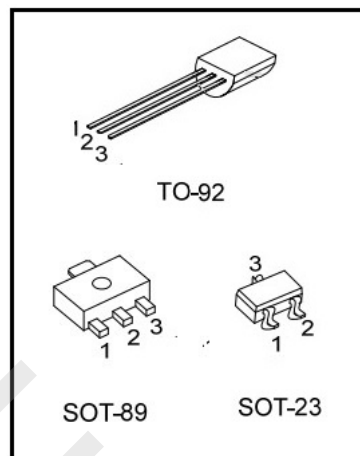
FEATURES

- Sensitive Gate Trigger Current – 200uA Maximum
- Low Reverse and forward Blocking Current – 100uA Maximum, $T_c=125^{\circ}\text{C}$
- Low Holding Current – 5mA Maximum
- Low On-State Voltage (1.3V(Typ.))
- Glass-Passivated Surface for Reliability and Uniformity

APPLICATIONS

PNPN devices designed for high volume, line-powered consumer applications such as relay and lamp drivers, small motor controls, gate drivers for larger thyristors, and sensing and detection circuits.

SYMBOL



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

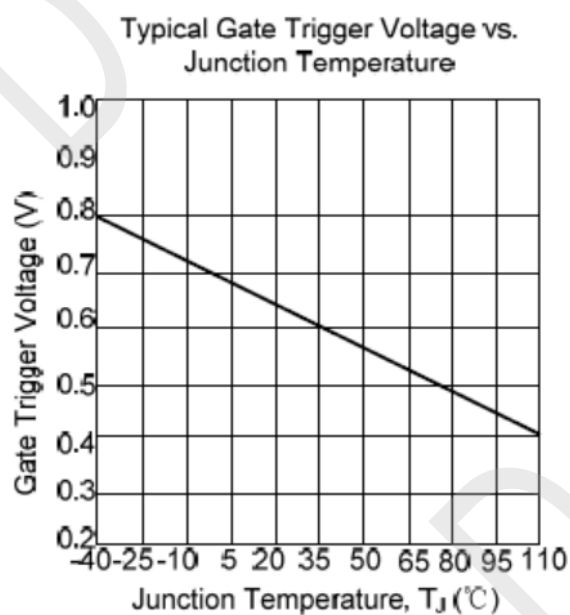
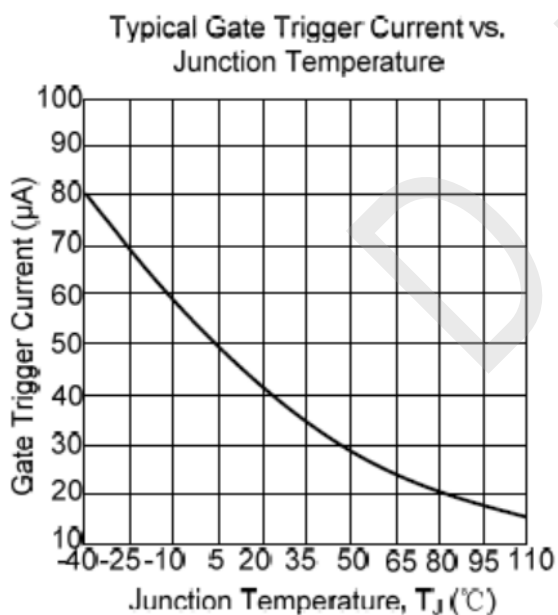
ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Repetitive Peak Off-State Voltages	V_{DRM} , V_{RRM}	600	V
RMS on-State Current	$I_{\text{T(RMS)}}$	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 – Forward	P_{GM}	0.1	W
Peak Gate Power	$P_{\text{G(AV)}}$	0.01	W
Peak Reverse Gate Voltage	V_{RGM}	5	V
Operating junction temperature	T_{J}	-40~+125	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-40~+150	$^{\circ}\text{C}$

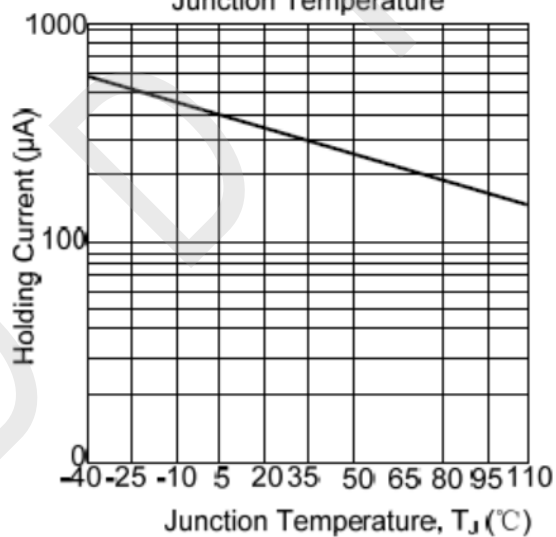
ELECTRICAL CHARACTERISTICS (T_J=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
Peak Repetitive Forward or Reverse Blocking Current	I _{DRM} I _{RRM}	V _{AK} = Rated V _{DRM} or V _{RRM} ;		10	uA
Gate Trigger Current	I _{GT}	V _D =12V, R _L =100Ω	30	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		1.7	V
Latch Current	I _L	I _G =1.2I _{GT}		10	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

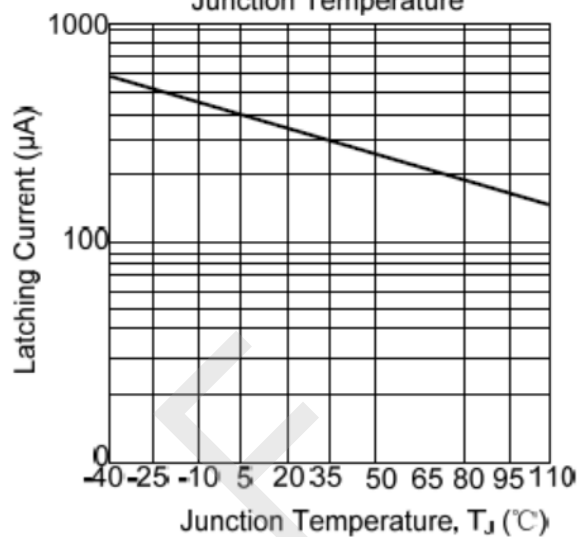
TYPICAL CHARACTERISTICS



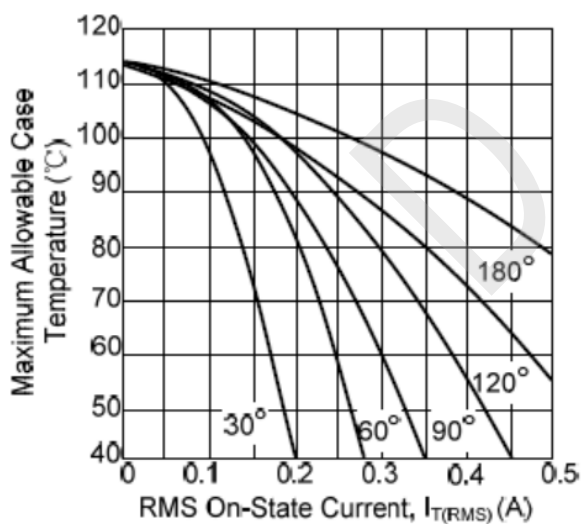
Typical Holding Current vs.
Junction Temperature



Typical Latching Current vs.
Junction Temperature



Typical RMS Current Derating



Typical On-State Characteristics

