

EVVOSEMI[®]

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

Product Specification

▶ Domestic	Part Number	BT131
▶ Overseas	Part Number	BT131
▶ Equivalent	Part Number	BT131

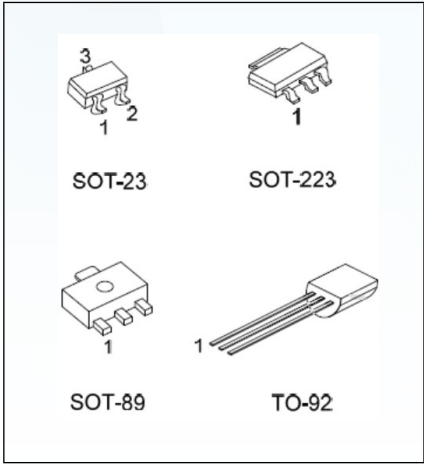
EV is the abbreviation of name EVVO

FEATURES

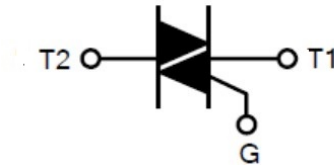
- Direct interfacing to logic level ICs
- Direct interfacing to low power gate drive circuits and microcontrollers
- High blocking voltage capability
- Planar passivated for voltage ruggedness and reliability
- Triggering in all four quadrants
- Very sensitive gate

APPLICATIONS

- General purpose bi-directional switching and phase control application.
- Air conditioner indoor fan control
- General purpose motor control
- General purpose switching



SYMBOL:



Package	Pin assignment		
	1	2	3
TO-92	T1	G	T2
SOT-223	T1	T2	G
SOT-89	T1	T2	G
SOT-23	T1	G	T2

ABSOLUTE

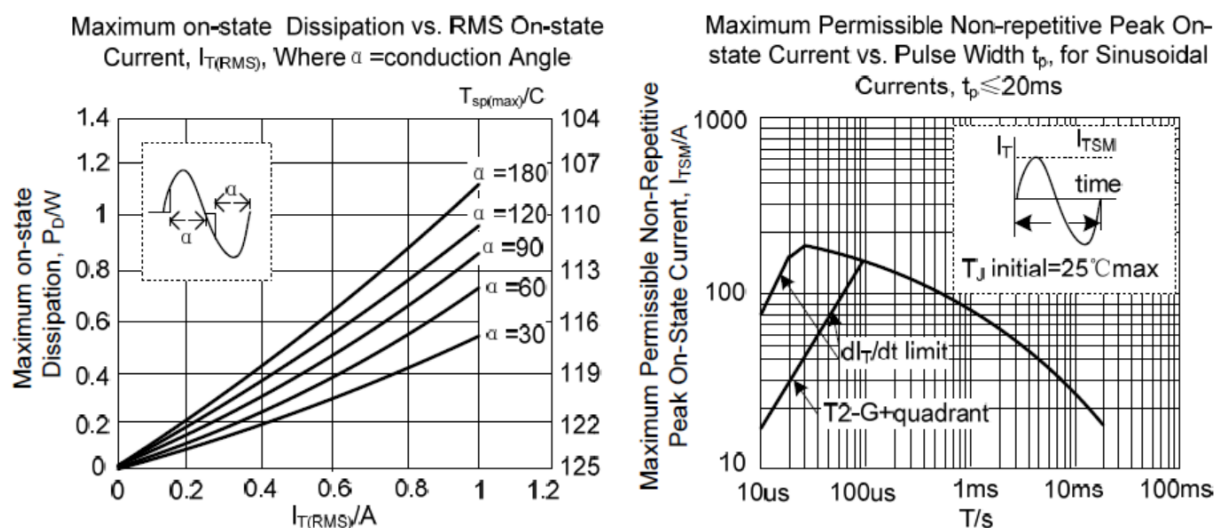
MAXIMUM RATINGS

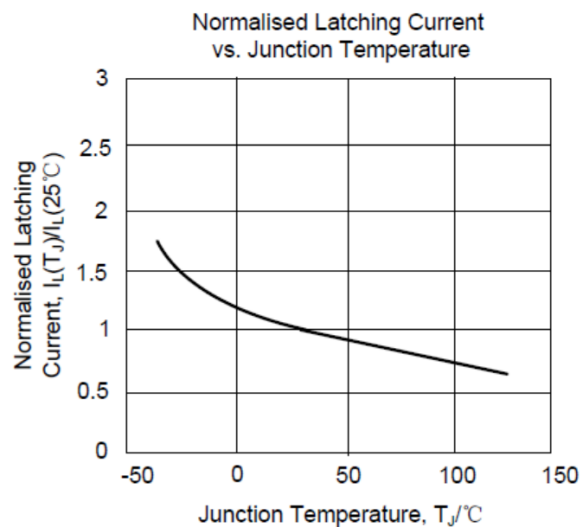
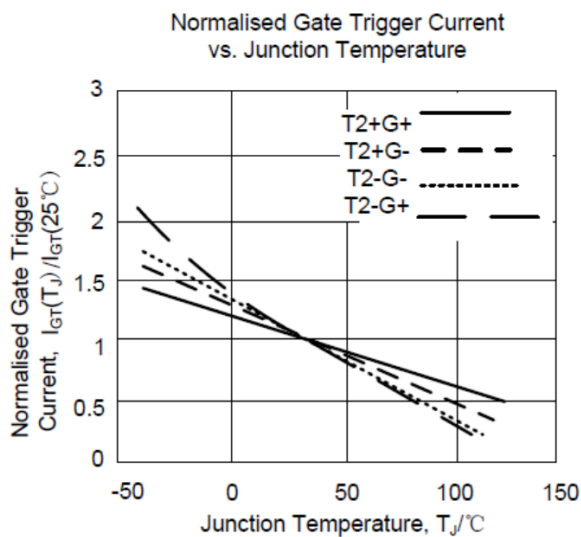
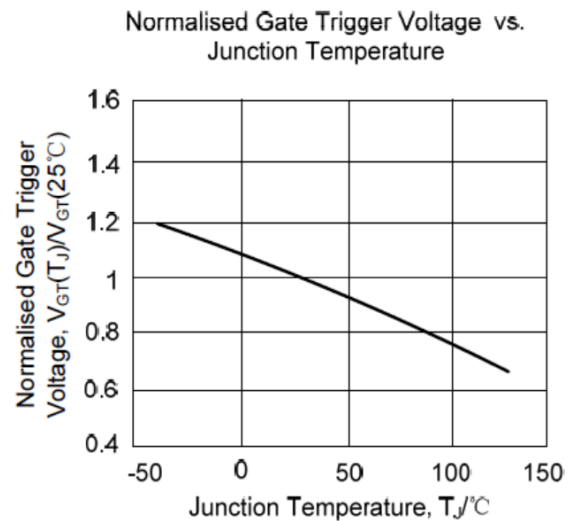
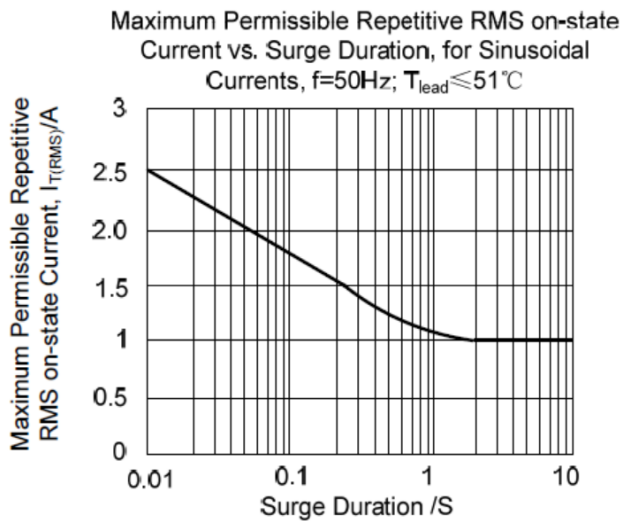
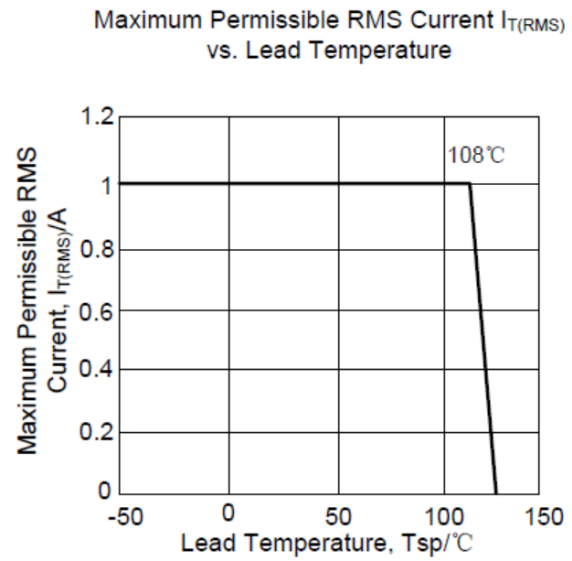
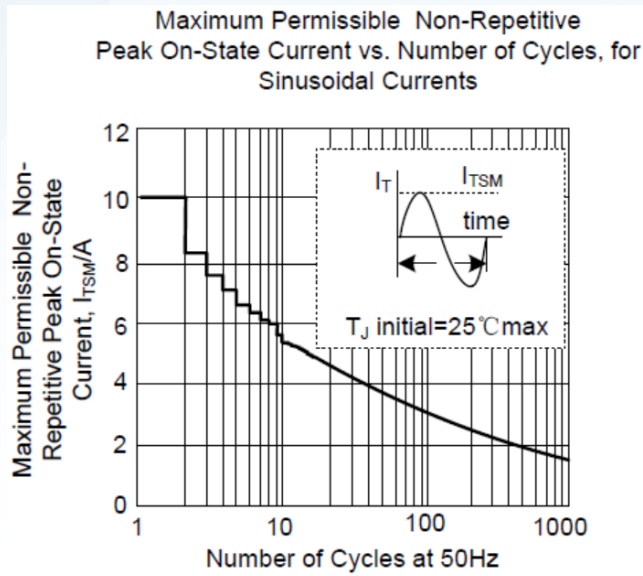
PARAMETER	SYMBOL	VALUE		UNIT
Repetitive Peak Off-State Voltages	V_{DRM}, V_{RRM}	600		V
RMS on-State Current	$I_{T(RMS)}$	1		A
Non-Repetitive Peak On-State Current	I_{TSM}	16		A
I^2t for fusing	I^2t	1.28		A ² s
Repetitive rate of rise of on-state current after triggering	dI_T/dt	I	50	A/uS
		II	50	
		III	50	
		IV	10	
Peak gate current	I_{GM}	2		A
Peak Gate Voltage	V_{GM}	5		V
Peak Gate Power	P_{GM}	5		W
Average Gate Power	$P_{G(AV)}$	0.5		W
Operating junction temperature	T_J	+125		°C
Storage Temperature	T_{STG}	-40 ~ +150		°C

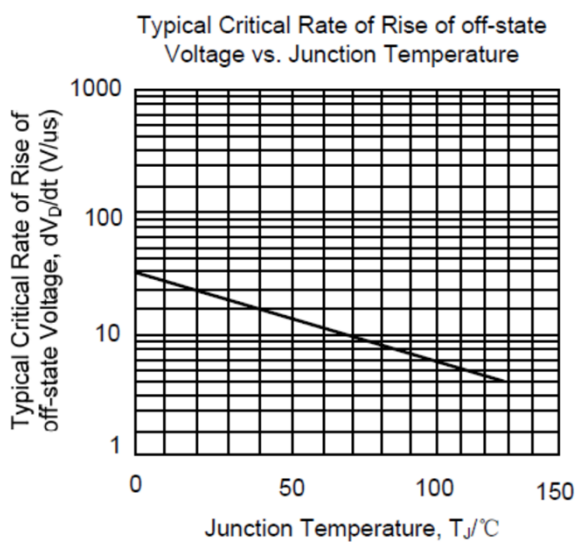
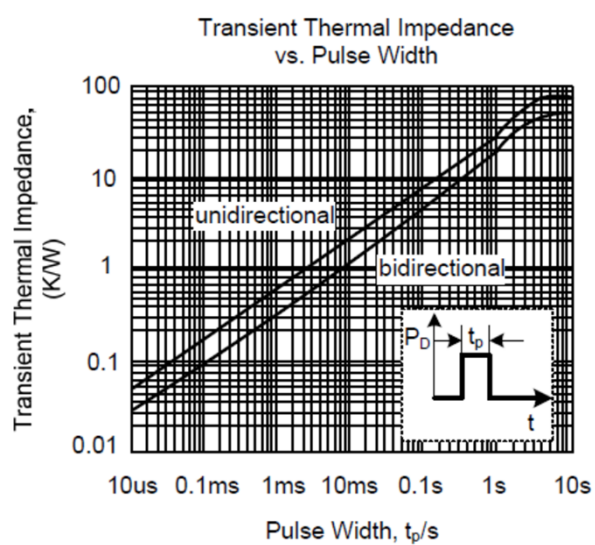
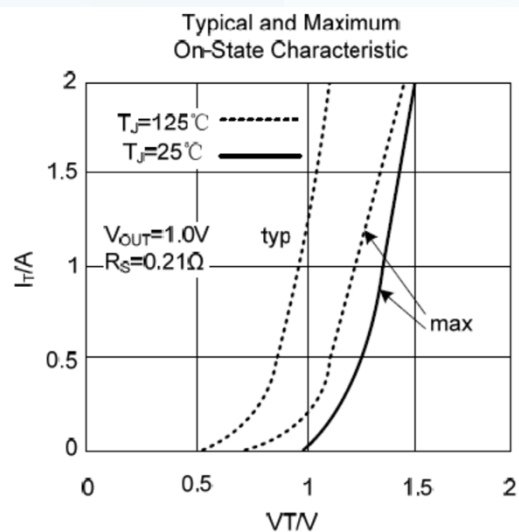
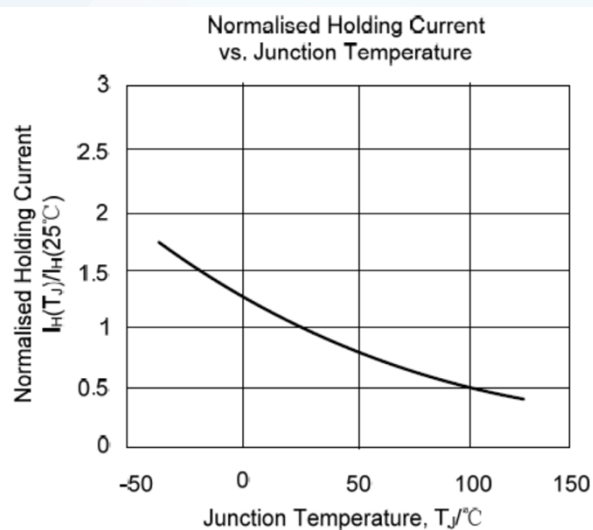
ELECTRICAL CHARACTERISTICS (T_J=25°C)

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} ;		0.5	mA
Gate Trigger Current	I_{GT}	$V_D=12V$, $R_L=100\Omega$	I	5.0	mA
			II	5.0	
			III	5.0	
			IV	10	
Gate Trigger Voltage	V_{GT}	$V_D=12V$, $I_T=100mA$		1.5	V
Peak Forward On-State Voltage	V_{TM}	$I_T=2.0A$		1.5	V
Latch Current	I_L	$V_D=12V$ $I_G=0.1A$,	I	5.0	mA
			II	8.0	
			III	5.0	
			IV	5.0	
Holding Current	I_H	$V_D=12V$, $I_G=0.1A$		5	mA
Gate Non-Trigger Voltage	V_{GD}	$V_D=V_{DRM}$	0.2		V
Critical Rate of Rise of Off-State Voltage	dV/dt	$V_D=67\%V_{DRM}$, $R_{GK}=1k\Omega$	5		V/ μs

ELECTRICAL CHARACTERISTIC CURVE







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