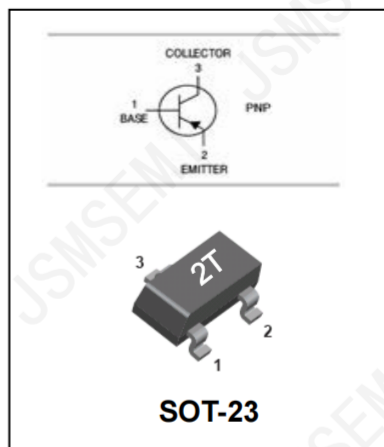


FEATURES

- Epitaxial planar die construction
- MSL Class 1 compatible

APPLICATIONS

- General purpose in desktop & handheld systems
- Ideal for medium-power signal amplification and switching

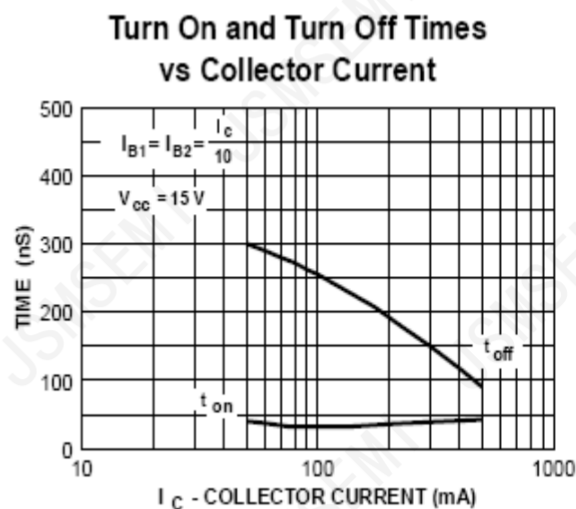
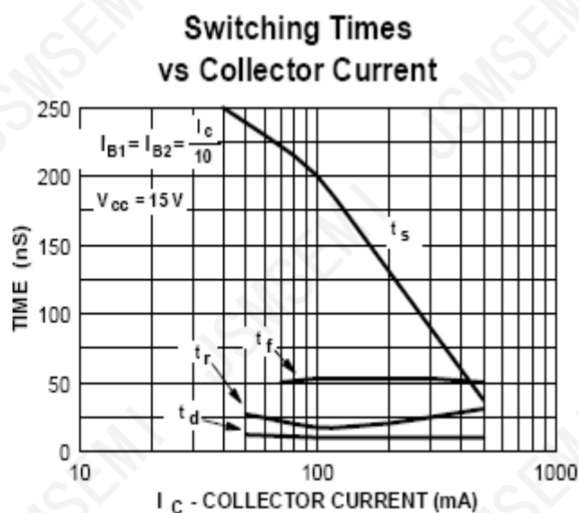
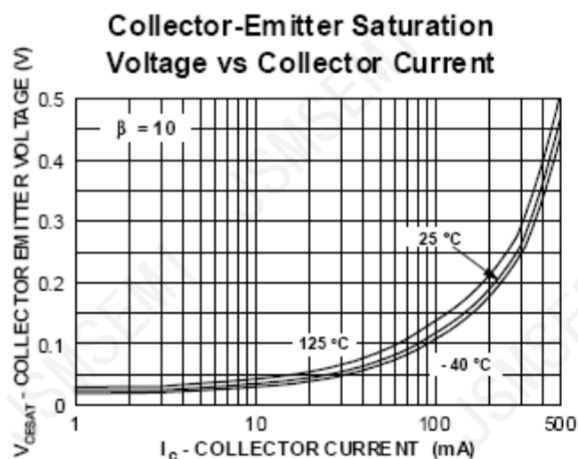
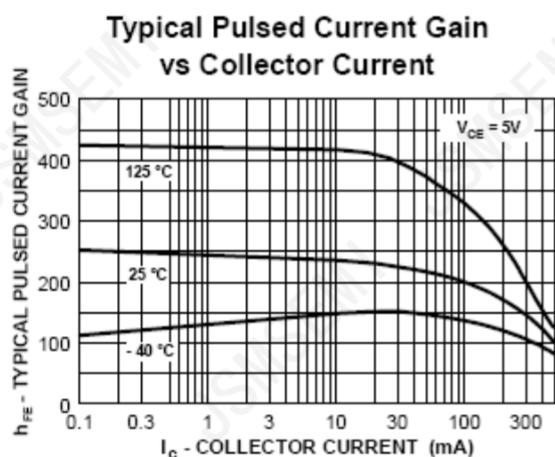
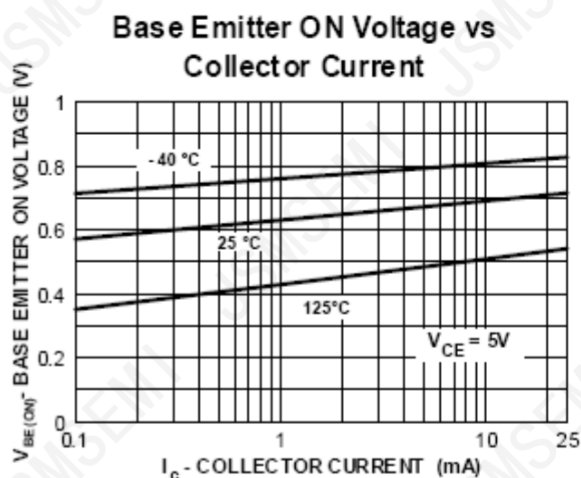
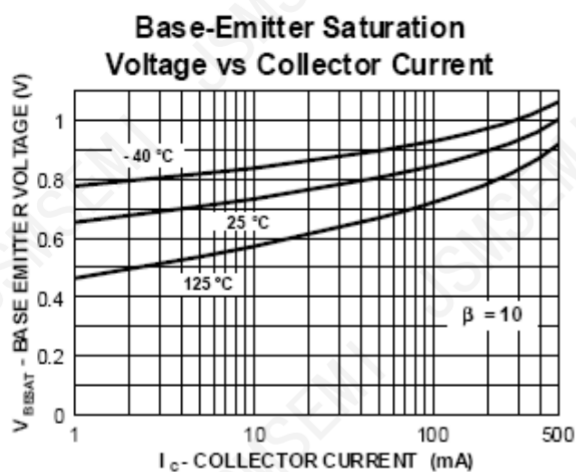


MAXIMUM RATING (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CB0}	-40	V
Collector-Emitter Voltage	V_{CE0}	-40	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current (Continuous)	I_C	-0.6	A
Collector Current (Peak)	I_{CM}	-1.2	A
Power Dissipation (Collector)	P_C	350	mW
Thermal Resistance (Junction-to-Ambient)	$R_{\theta JA}$	357	$^\circ\text{C/W}$
Thermal Resistance (Junction-to-Case)	$R_{\theta JC}$	250	$^\circ\text{C/W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^\circ\text{C}$

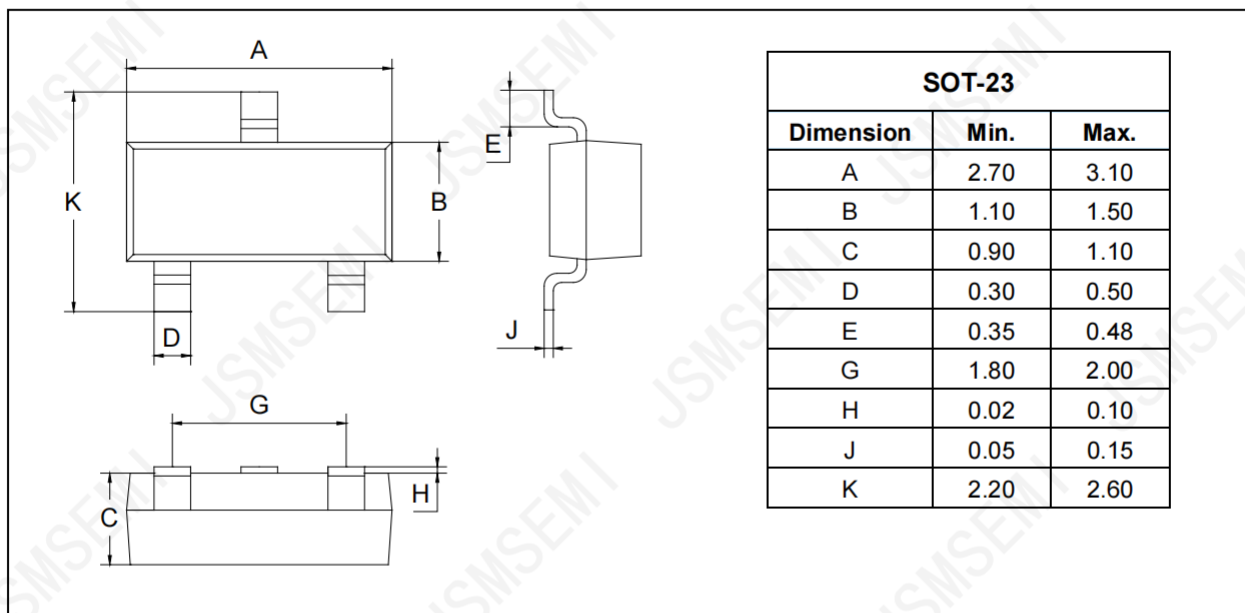
ELECTRICAL CHARACTERISTICS (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-40			V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, I_B = 0$	-40			V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}, I_C = 0$	-5			V
Collector Cut-off Current	I_{CBO}	$V_{CB} = -35\text{V}, I_E = 0$	-	-	-0.1	μA
Collector Cut-off Current	I_{CEX}	$V_{CE} = -35\text{V}, V_{BE} = -0.4\text{V}$			-0.10	μA
Base Cut-off Current	I_{BL}	$V_{CE} = -35\text{V}, V_{BE} = -0.4\text{V}$			-0.10	μA
DC Current Gain	h_{FE}	$V_{CE} = -1\text{V}, I_C = -0.1\text{mA}$	30			-
		$V_{CE} = -1\text{V}, I_C = -1.0\text{mA}$	60			
		$V_{CE} = -1\text{V}, I_C = -10\text{mA}$	100			
		$V_{CE} = -2\text{V}, I_C = -150\text{mA}$	100		300	
		$V_{CE} = -2\text{V}, I_C = -500\text{mA}$	20			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -150\text{mA}, I_B = -15\text{mA}$ $I_C = -500\text{mA}, I_B = -50\text{mA}$			-0.40 -0.75	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -150\text{mA}, I_B = -15\text{mA}$ $I_C = -500\text{mA}, I_B = -50\text{mA}$	-0.75		-0.95 -1.30	V
Transition Frequency	f_T	$V_{CE} = -10\text{V}, I_C = -20\text{mA}$ $f = 100\text{MHz}$	200			MHz

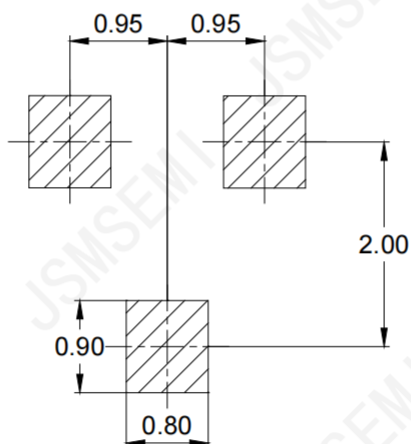
TYPICAL CHARACTERISTICS (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)


PACKAGE OUTLINE (Unit: mm)

Plastic surface mounted package



MOUNTING PAD LAYOUT (Unit: mm)



Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

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