

■ PRODUCT CHARACTERISTICS

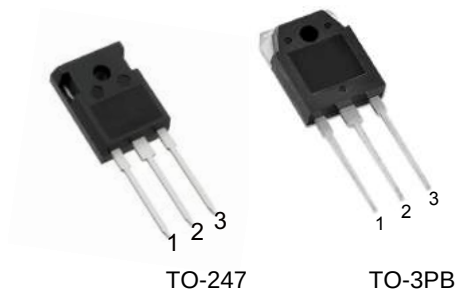
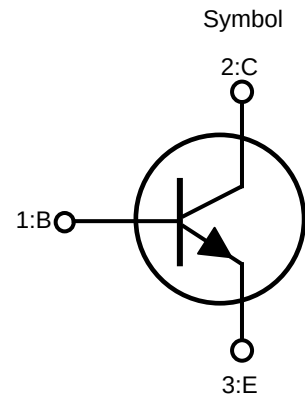
V_{CBO}	120V
V_{CEO}	120V
I_C	10A

■ APPLICATIONS

Power amplifier applications

■ FEATURES

High breakdown voltage
Complement to type 2SB688



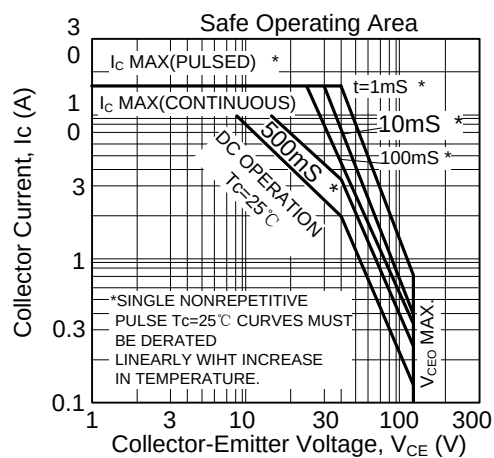
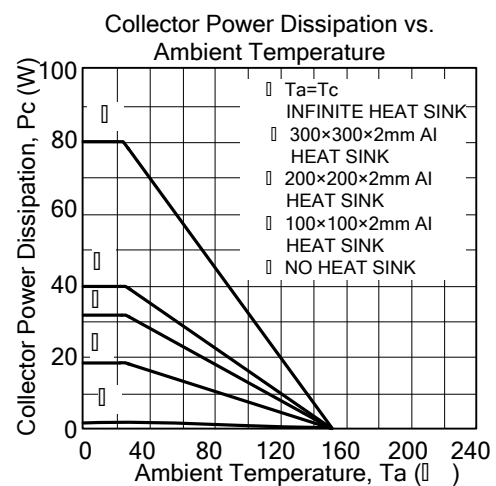
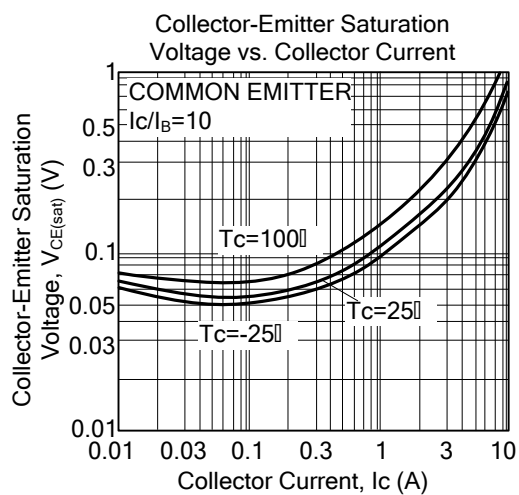
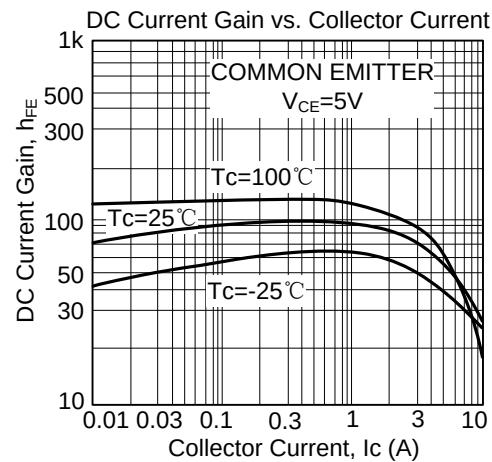
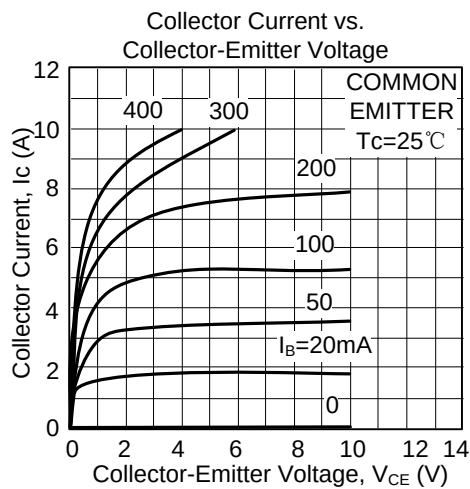
■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETERS	SYMBOL	RATINGS	UNITS
Collector-Base Voltage	V_{CBO}	120	V
Collector-Emitter Voltage	V_{CEO}	120	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_C	10	A
Base Current	I_B	1	A
Collector Power Dissipation ($T_C=25^\circ\text{C}$)	P_C	80	W
Max. Operating Junction Temperature	T_J	+150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^\circ\text{C}$

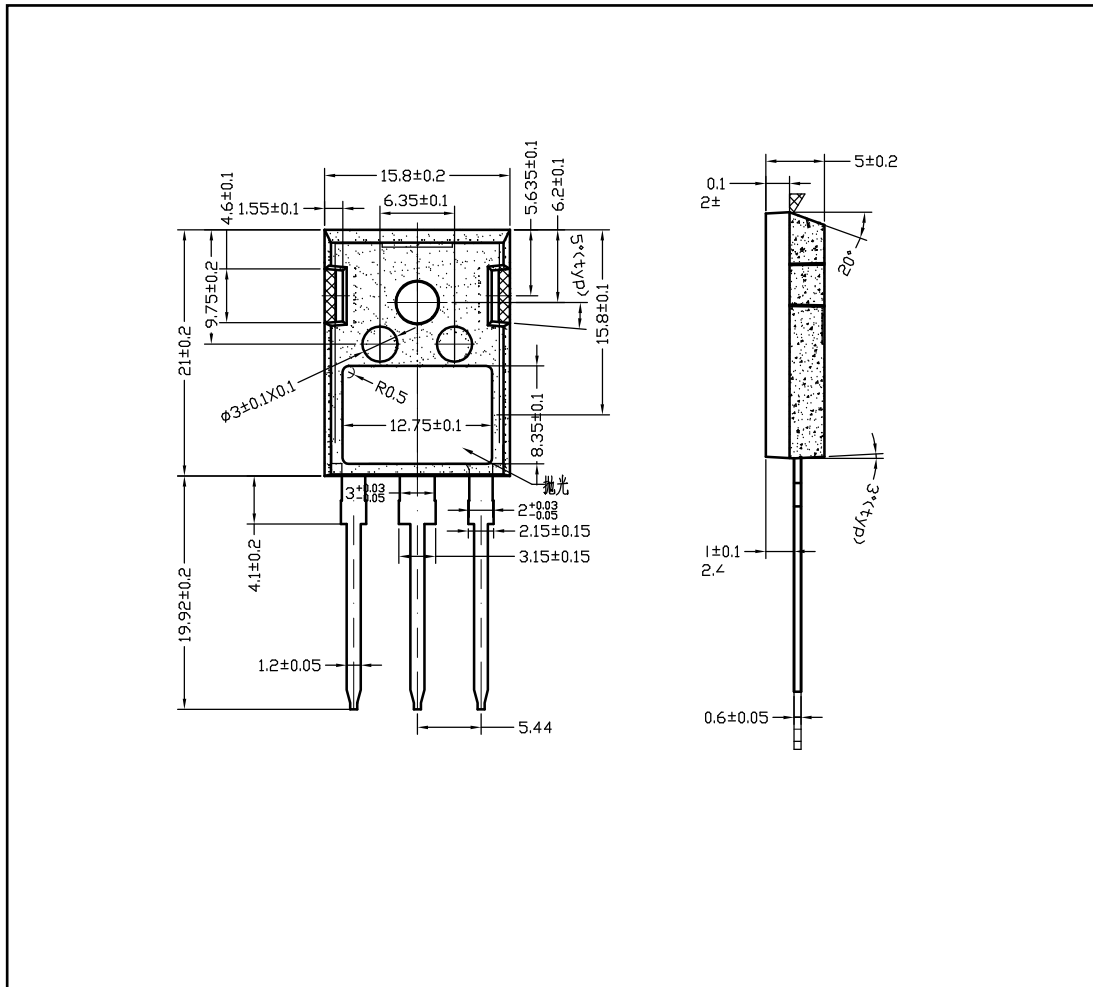
■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50\text{mA}$, $I_B=0$	120			V
Collector Cut-off Current	I_{CBO}	$V_{CB}=120\text{V}$, $I_E=0$			10	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5\text{V}$, $I_C=0$			10	μA
DC Current Gain	h_{FE}	$V_{CE}=5\text{V}$, $I_C=1\text{A}$	55		160	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=6\text{A}$, $I_B=0.6\text{A}$			2.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=5\text{V}$, $I_C=5\text{A}$			1.5	V
Transition Frequency	f_T	$V_{CE}=5\text{V}$, $I_C=1\text{A}$		12		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1\text{MHz}$		170		pF

■ TYPICAL CHARACTERISTICS



■ TO-247-3L PACKAGE OUTLINE DIMENSIONS



■ TO-3PB PACKAGE OUTLINE DIMENSIONS

