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NPN Epitaxial Silicon Transistor KSD1588

Low Frequency Power Amplifier

- Low Speed Switching
- This is a Pb–Free Device

ABSOLUTE MAXIMUM RATINGS

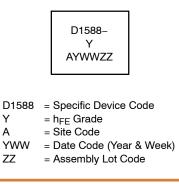
 $(T_C = 25^{\circ}C \text{ unless otherwise noted.})$

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	100	V
V _{CEO}	Collector-Emitter Voltage	60	V
V _{EBO}	Emitter-Base Voltage	7	V
۱ _C	Collector Current (DC)	7	А
I _{CP}	Collector Current (Pulse) (Note 1)	15	А
I _B	Base Current	3.5	А
P _C	Collector Dissipation ($T_A = 25^{\circ}C$)	2	W
	Collector Dissipation (T _C = 25°C)	30	W
TJ	Junction Temperature	150	°C
T _{STG}	Storage Temperature	–55 ~ 150	°C

1. Base 2. Collector 3. Emitter

> TO-220 Fullpack CASE 221AT

MARKING DIAGRAM



ORDERING INFORMATION

Device	Package	Shipping
KSD1588YTU	TO-220 Fullpack (Pb-Free)	1,000 Units / Tube

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected. 1. $PW \le 300 \ \mu$ s, Duty Cycle $\le 10\%$.

ELECTRICAL CHARACTERISTICS (T_C = 25°C unless otherwise noted.)

Symbol	Parameter	Test Conditions	Min	Max	Unit
I _{CBO}	Collector Cut-off Current	$V_{CB} = 80 \text{ V}, I_E = 0$	-	10	μA
I _{EBO}	Emitter Cut-off Current	$V_{EB} = 5 V, I_{C} = 0$	-	10	μA
h _{FE1} h _{FE2}	DC Current Gain (Note 2)	$V_{CE} = 1 V, I_C = 3 A$ $V_{CE} = 1 V, I_C = 5 A$	40 20	200 -	
V _{CE} (sat)	Collector-Emitter Saturation Voltage (Note 2)	I _C = 5 A, I _B = 0.5 A	-	0.5	V
V _{BE} (sat)	Base-Emitter Saturation Voltage (Note 2)	I _C = 5 A, I _B = 0.5 A	-	1.5	V

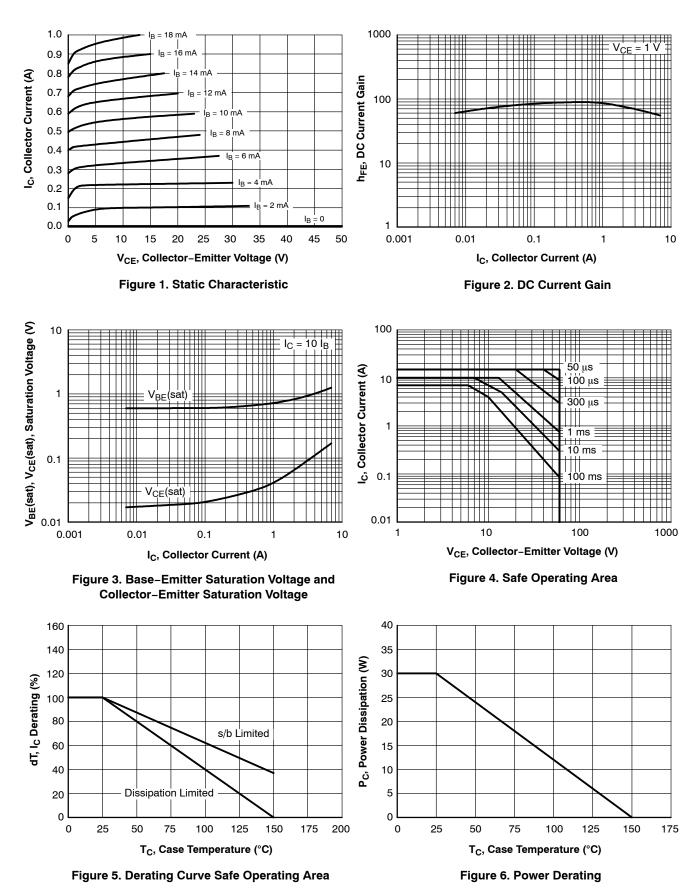
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions. 2. Pulse Test: $PW \le 350 \ \mu s$, Duty Cycle $\le 2\%$.

h_{FE1} Classification

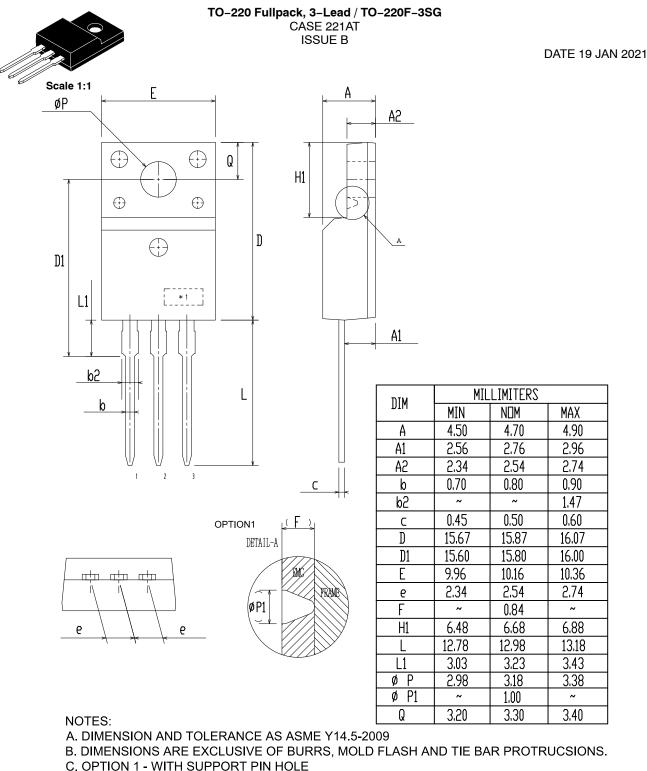
Classification	R	0	Y
h _{FE1}	40 ~ 80	80 ~ 120	100 ~ 200

KSD1588





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OPTION 2 - NO SUPPORT PIN HOLE

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DESCRIPTION:	TO-220 FULLPACK, 3-LEAD / TO-220F-3SG		PAGE 1 OF 1

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