

### SEMICONDUCTOR TECHNICAL DATA

# KTA1664

#### EPITAXIAL PLANAR PNP TRANSISTOR

#### HIGH CURRENT APPLICATION.

#### FEATURES

- · 1W (Mounted on Ceramic Substrate).
- · Small Flat Package.
- $\cdot$  Complementary to KTC4376.
- Suffix <u>U</u> : Qualified to AEC-Q101. ex) KTA1664-Y-RTF/P<u>U</u>

#### MAXIMUM RATING (Ta=25℃)

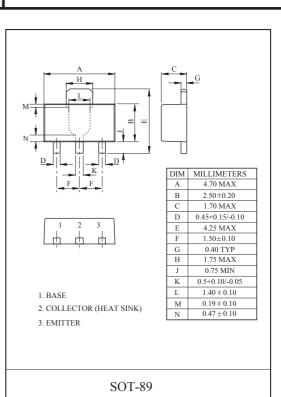
CHARACTERISTIC	SYMBOL	RATING	UNIT	
Collector-Base Voltage	V <sub>CBO</sub>	-35	V	
Collector-Emitter Voltage	V <sub>CEO</sub>	-30	V	
Emitter-Base Voltage	V <sub>EBO</sub>	-5	V	
Collector Current	I <sub>C</sub>	-800	mA	
Base Current	IB	-160	mA	
Collector Power Dissipation	P <sub>C</sub>	500	mW	
	P <sub>C</sub> *	1	W	
Junction Temperature	Tj	150	°C	
Storage Temperature Range	T <sub>stg</sub>	-55~150	°C	

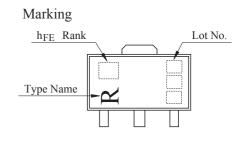
 $P_{C}^{*}$ : KTA1664 mounted on ceramic substrate (250mm<sup>2</sup>x0.8t)

#### ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I <sub>CBO</sub>	$V_{CB}$ =-35V, $I_{E}$ =0	-	-	-100	nA
Emitter Cut-off Current	I <sub>EBO</sub>	$V_{EB}$ =-5V, $I_C$ =0	-	-	-100	nA
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =-10mA, I <sub>B</sub> =0	-30	-	-	V
DC Current Gain	$h_{FE}(1)$ (Note)	V <sub>CE</sub> =-1V, I <sub>C</sub> =-100mA	100	-	320	
	$h_{FE}(2)$	V <sub>CE</sub> =-1V, I <sub>C</sub> =-700mA	35	-	-	
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-500mA, I <sub>B</sub> =-20mA	-	-	-0.7	V
Base-Emitter Voltage	V <sub>BE</sub>	V <sub>CE</sub> =-1V, I <sub>C</sub> =-10mA	-0.5	-	-0.8	V
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> =-10mA	-	120	-	MHz
Collector Output Capacitance	C <sub>ob</sub>	$V_{CB}$ =-10V, I <sub>E</sub> =0, f=1MHz	-	19	-	pF

Note :  $h_{FE}$  Classification  $~O{:}100\,{\sim}\,200,~Y{:}160\,{\sim}\,320$ 

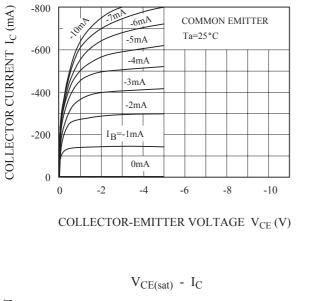


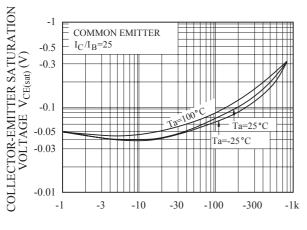




## **KTA1664**

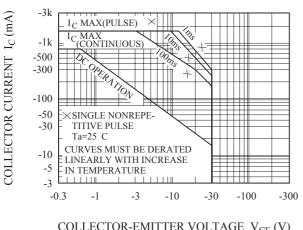
 $I_{C}$  -  $V_{CE}$ 





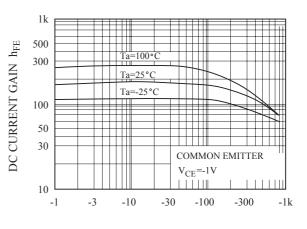
COLLECTOR CURRENT IC (mA)





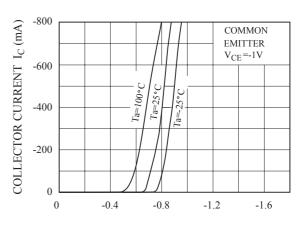
COLLECTOR-EMITTER VOLTAGE V<sub>CE</sub> (V)





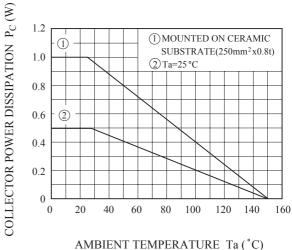
COLLECTOR CURRENT IC (mA)





BASE-EMITTER VOLTAGE V<sub>BE</sub> (V)

Pc - Ta



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2. When you intend to use these products with equipment or device which require an extremely high of reliability and special applications (such as automobile, air travel aerospace, transportation equipment, life support, system and safety devices) in which special quality and reliability and the failure or malfunction of products may directly jeopardize or harm the human body or damage to property and any application other than the standard application intended, please be sure to consult with our sales representative in advance.

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