

KEC**SEMICONDUCTOR
TECHNICAL DATA****KTC2983D/L****EPITAXIAL PLANAR NPN TRANSISTOR**

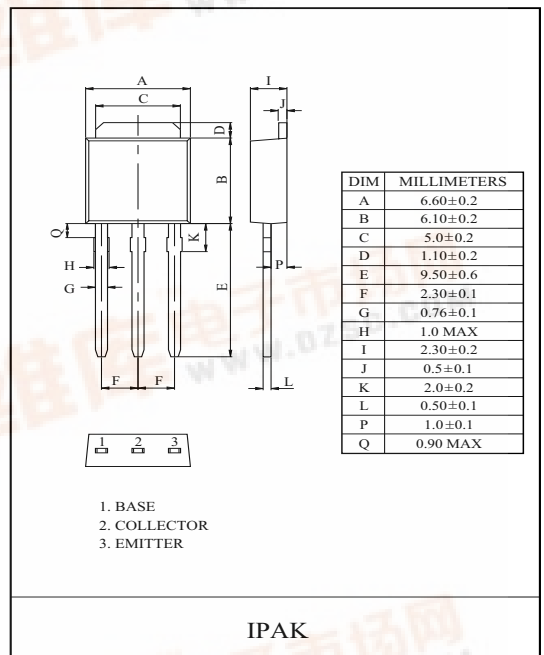
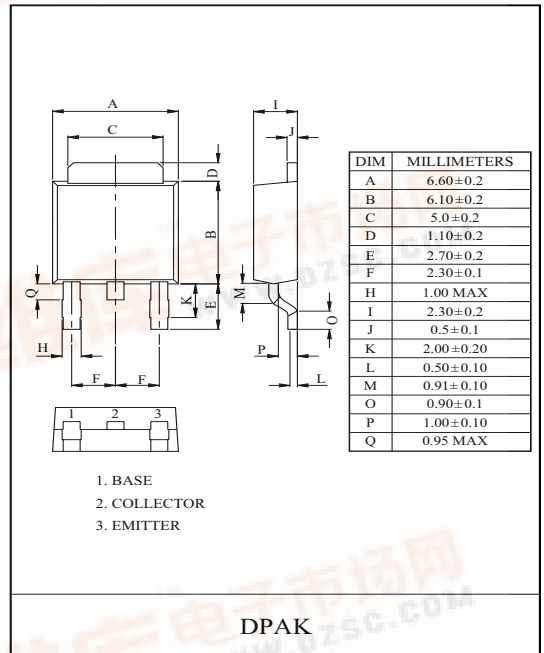
HIGH VOLTAGE APPLICATION.

FEATURES

- High Transition Frequency : $f_T=100\text{MHz}$ (Typ.).
- Complementary to KTA1225D/L.

MAXIMUM RATING ($T_a=25^\circ\text{C}$)

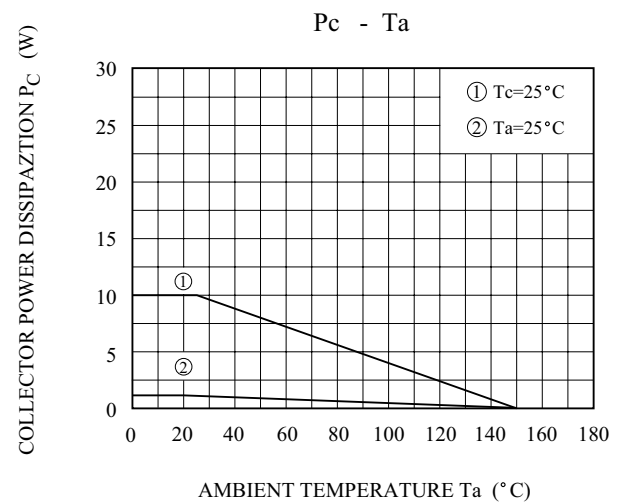
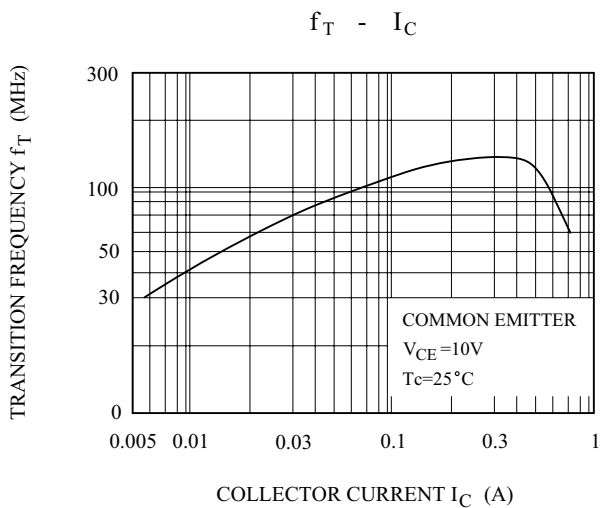
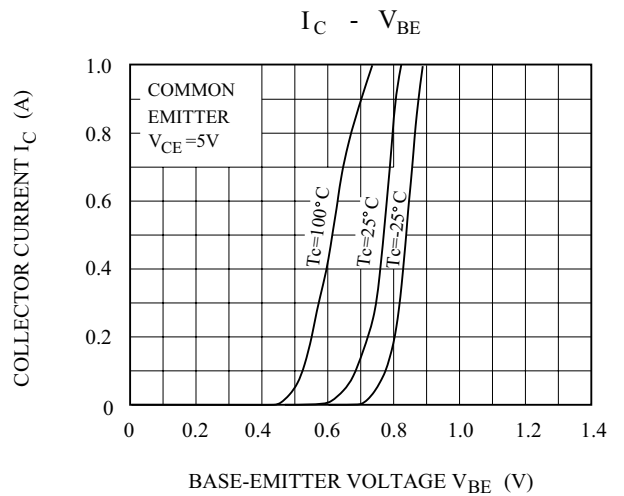
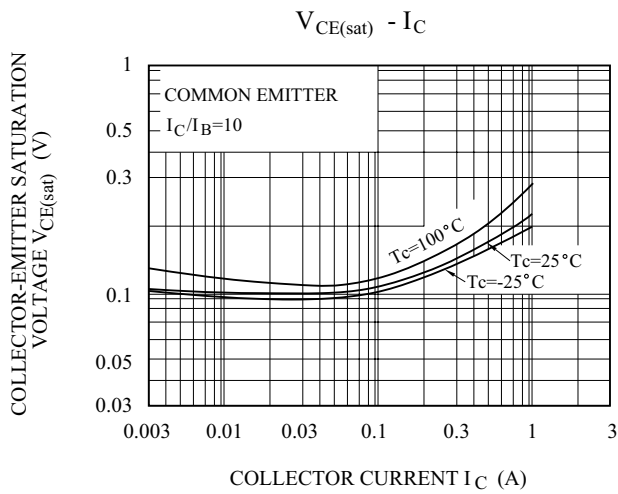
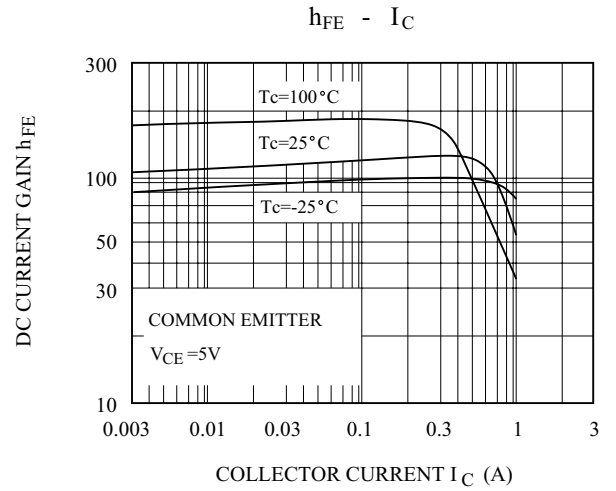
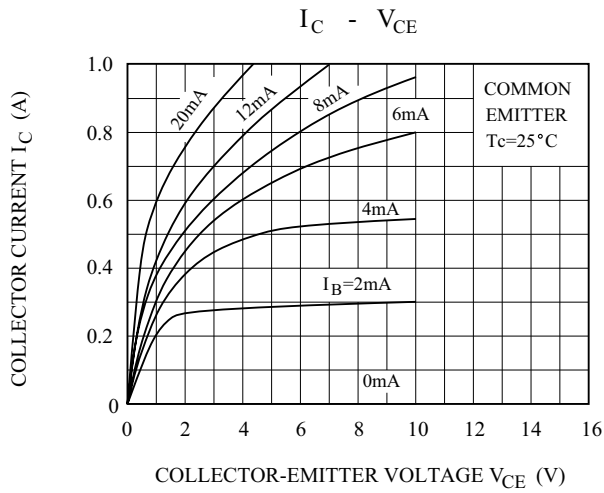
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	160	V
Collector-Emitter Voltage		V_{CEO}	160	V
Emitter-Base Voltage		V_{EBO}	5	V
Collector Current		I_{C}	1.5	A
Base Current		I_{B}	1.0	A
Collector Power Dissipation	$T_a=25^\circ\text{C}$	P_{C}	1.0	W
	$T_c=25^\circ\text{C}$		10	
Junction Temperature		T_{J}	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	-55 ~ 150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{\text{CB}}=160\text{V}, I_{\text{E}}=0$	-	-	1.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{\text{EB}}=5\text{V}, I_{\text{C}}=0$	-	-	1.0	μA
Collector-Emitter Breakdown Voltage	$V_{(\text{BR})\text{CEO}}$	$I_{\text{C}}=10\text{mA}, I_{\text{B}}=0$	160	-	-	V
Emitter-Base Breakdown Voltage	$V_{(\text{BR})\text{EBO}}$	$I_{\text{E}}=1\text{mA}, I_{\text{C}}=0$	5.0	-	-	V
DC Current Gain	$h_{\text{FE}}(\text{Note})$	$V_{\text{CE}}=5\text{V}, I_{\text{C}}=100\text{mA}$	70	-	240	
Collector-Emitter Saturation Voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}}=500\text{mA}, I_{\text{B}}=50\text{mA}$	-	-	1.5	V
Base-Emitter Voltage	V_{BE}	$V_{\text{CE}}=5\text{V}, I_{\text{C}}=500\text{mA}$	-	-	1.0	V
Transition Frequency	f_{T}	$V_{\text{CE}}=10\text{V}, I_{\text{C}}=100\text{mA}$	-	100	-	MHz
Collector Output Capacitance	C_{ob}	$V_{\text{CB}}=10\text{V}, I_{\text{E}}=0, f=1\text{MHz}$	-	25	-	pF

Note: f_{req} Classification O:70~140, Y:120~240

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