

UTC D965SS / D965ASS NPN EPITAXIAL SILICON TRANSISTOR

LOW VOLTAGE HIGH CURRENT
NPN TRANSISTOR

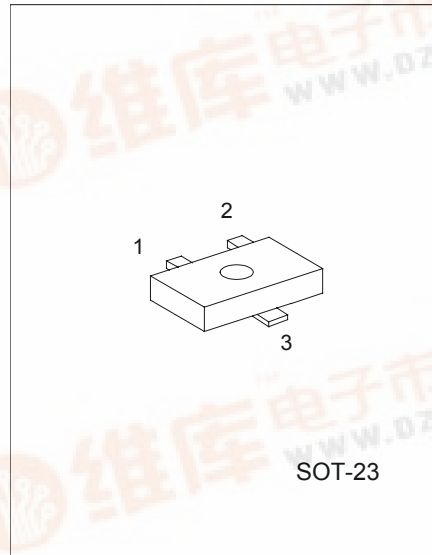
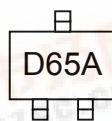
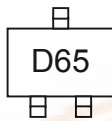
FEATURES

- * Collector current up to 5A
- * D965SS : Collector-Emitter voltage up to 20 V
- * D965ASS : Collector-Emitter voltage up to 30 V

APPLICATIONS

- * Audio amplifier
- * Flash unit of camera
- * Switching circuit

MARKING(D965SS) MARKING(D965ASS)



1: EMITTER 2: BASE 3: COLLECTOR

ABSOLUTE MAXIMUM RATINGS (Ta=25°C , unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V _{CB0}	40	V
Collector-emitter voltage	V _{CEO}	20	V
D965SS		30	
D965ASS			
Emitter-base voltage	V _{EB0}	7	V
Collector dissipation(Ta=25°C)	P _c	750	mW
Collector current	I _c	5	A
Junction Temperature	T _j	150	°C
Storage Temperature	T _{STG}	-65 ~ +150	°C

ELECTRICAL CHARACTERISTICS(Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	BV _{CB0}	I _c =100μA, I _E =0	40			V
Collector-emitter breakdown voltage	BV _{CEO}	I _c =1mA, I _B =0	20			V
D965SS			30			
D965ASS						
Emitter-base breakdown voltage	BV _{EB0}	I _E =10μA, I _c =0	7			V
Collector cut-off current	I _{CB0}	V _{CB} =10V, I _E =0			100	nA
Emitter cut-off current	I _{EB0}	V _{EB} =7V, I _c =0			100	nA

UTC UNISONIC TECHNOLOGIES CO. LTD

1

QW-R206-016,B

UTC D965SS / D965ASS

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DC current gain(note)	hFE	VCE=2V, Ic=1mA VCE=2V, Ic=0.5A VCE=2V, Ic=2A	230 150	200	800	
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-emitter saturation voltage	VCE(sat)	Ic=3A, Ib= 0.1A			1	V
Current gain bandwidth product	fT	VCE=6V, Ic=50mA		150		MHz
Output capacitance	Cob	VCB=20V, IE=0 f=1MHz			50	pF

CLASSIFICATION OF hFE2

RANK	Q	R	S
RANGE	230-380	340-600	560-800

TYPICAL CHARACTERISTIC CURVES

Fig.1 Static characteristics

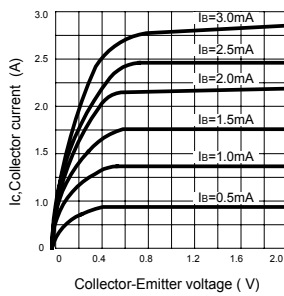


Fig.2 DC current Gain

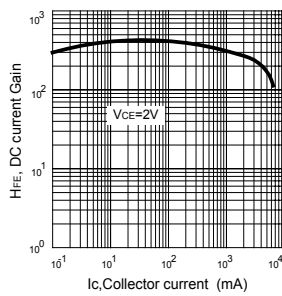


Fig.3 Base-Emitter on Voltage

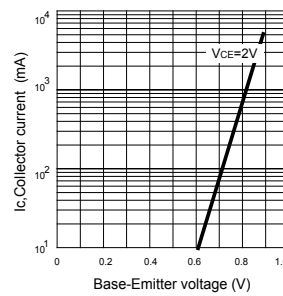


Fig.4 Saturation voltage

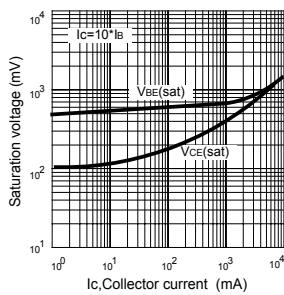


Fig.5 Current gain-bandwidth product

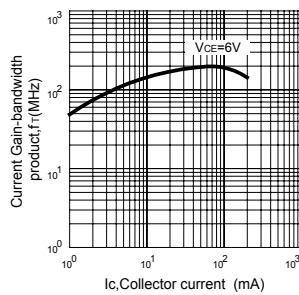
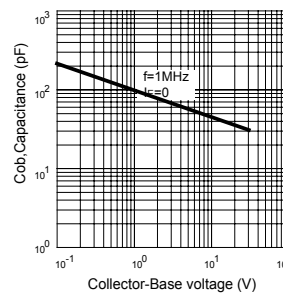


Fig.6 Collector output Capacitance



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