

DC-DC CONVERTERS RELAY DRIVERS, LAMP DRIVERS,
MOTOR DRIVERS, STROBES APPLICATION.

FEATURES

- Adoption of FBET, MBIT Processes.
- High Current Capacitance.
- Low Collector-to-Emitter Saturation Voltage.
- High-Speed Switching.
- Ultrasmall Package Facilitates Miniaturization in end Products.
- High Allowable Power Dissipation.
- Complementary to KTA1552T.

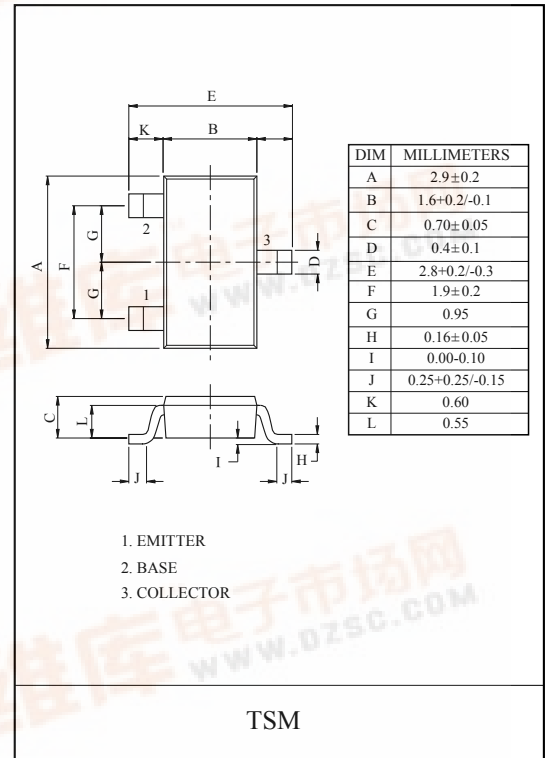
MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V _{CB0}	80	V
Collector-Emitter Voltage		V _{CES}	80	V
		V _{CEO}	50	
Emitter-Base Voltage		V _{EBO}	6	V
Collector Current	DC	I _C	3	A
	Pulse	I _{CP}	6	
Base Current		I _B	600	mA
Collector Power Dissipation		P _C *	0.9	W
Junction Temperature		T _j	150	°C
Storage Temperature Range		T _{stg}	-55 ~ 150	°C

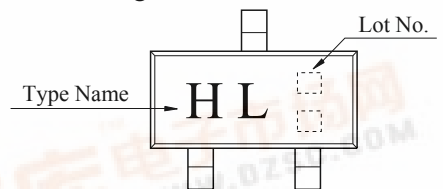
* Package mounted on a ceramic board (600mm² × 0.8mm)

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I _{CB0}	V _{CB} =40V, I _E =0	-	-	0.1	μA
Emitter Cut-off Current	I _{EBO}	V _{EB} =4V, I _C =0	-	-	0.1	μA
Collector-Base Breakdown Voltage	V _{(BR)CBO}	I _C =10μA, I _E =0	80	-	-	V
Collector-Emitter Breakdown Voltage	V _{(BR)CES}	I _C =100μA, V _{BE} =0	80	-	-	V
	V _{(BR)CEO}	I _C =1mA, I _B =0	50	-	-	V
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	I _E =10μA, I _C =0	6	-	-	V
Collector-Emitter Saturation Voltage	V _{CE(sat)1}	I _C =1A, I _B =50mA	-	80	120	mV
	V _{CE(sat)2}	I _C =2A, I _B =100mA	-	140	210	mV
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =2A, I _B =100mA	-	0.88	1.2	V
DC Current Gain	h _{FE}	V _{CE} =2V, I _C =100mA	200	-	560	
Transition Frequency	f _T	V _{CE} =10V, I _C =500mA	-	380	-	MHz
Collector Output Capacitance	C _{ob}	V _{CB} =10V, f=1MHz	-	13	-	pF
Switching Time	Turn-On Time	t _{on}	-	35	-	nS
	Storage Time	t _{stg}	-	300	-	
	Fall Time	t _f	-	22	-	

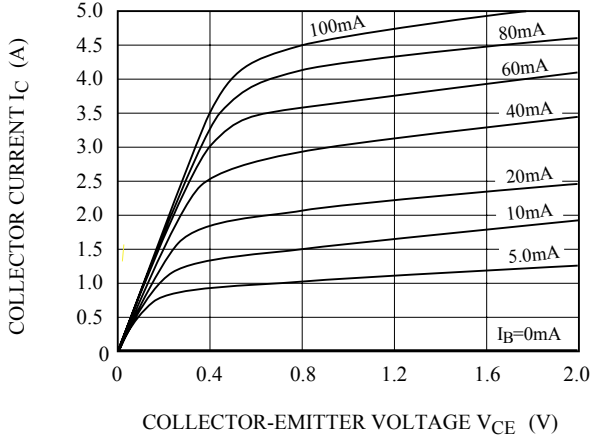


Marking

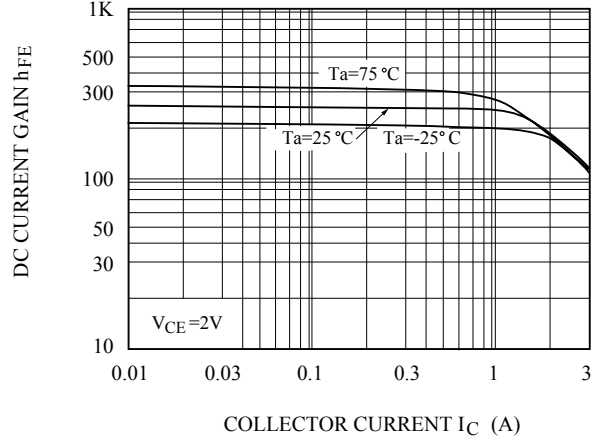


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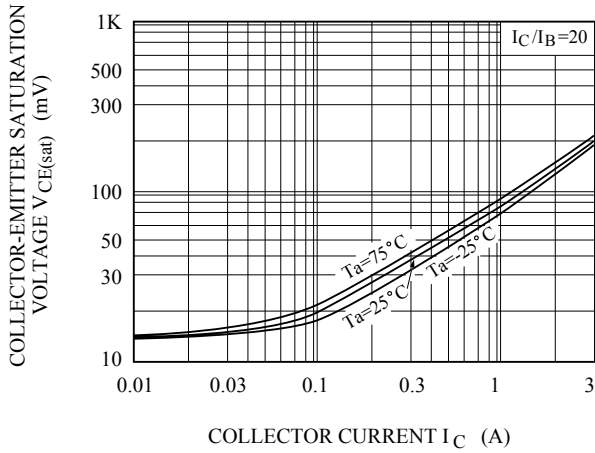
$I_C - V_{CE}$



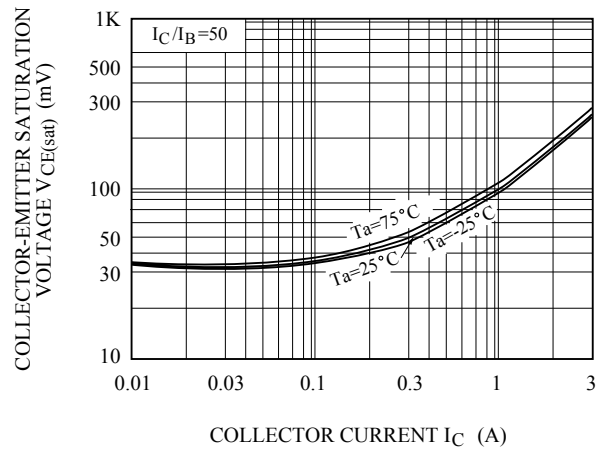
$h_{FE} - I_C$



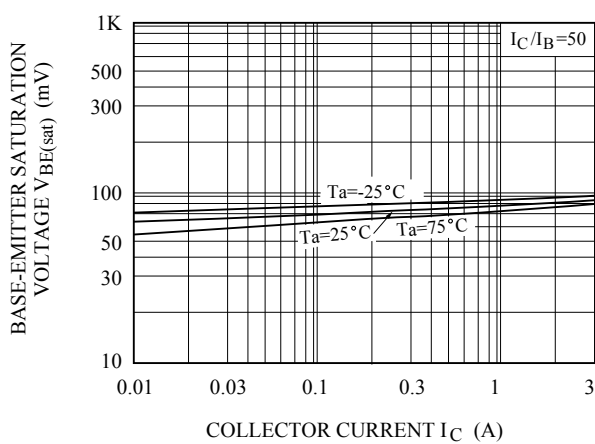
$V_{CE(sat)} - I_C$



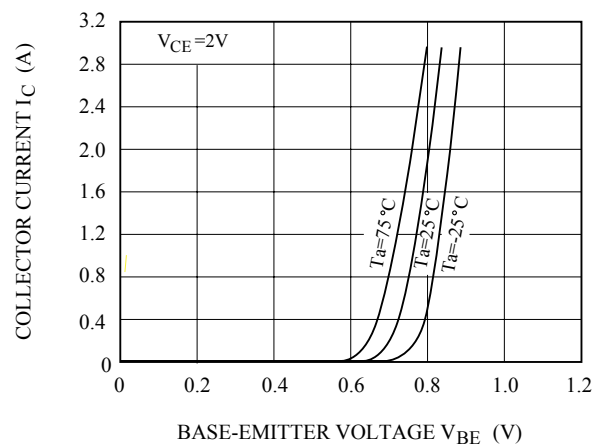
$V_{CE(sat)} - I_C$



$V_{BE(sat)} - I_C$



$I_C - V_{BE}$



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