FAIRCHILD

SEMICONDUCTOR TM

KSC2752

High Speed High Voltage Swiching Industrial Use

NPN Epitaxial Silicon Transistor



KSC2752

1. Emitter 2.Collector 3.Base

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _{CBO}	Collector-Base Voltage	500	V
V _{CEO}	Collector-Emitter Voltage	400	V
V _{EBO}	Emitter-Base Voltage	7	V
I _C	Collector Current (DC)	0.5	Α
I _{CP}	*Collector Current (Pulse)	1	Α
I _B	Base Current (DC)	0.25	Α
P _C	Collector Dissipation (T _a =25°C)	1	W
P _C	Collector Dissipation (T _C =25°C)	10	W
TJ	Junction Temperature	150	°C
T _{STG}	Storage Temperature	- 55 ~ 150	°C

* PW≤300μs, Duty Cycle≤10%

Electrical Characteristics $T_C=25^{\circ}C$ unless otherwise noted

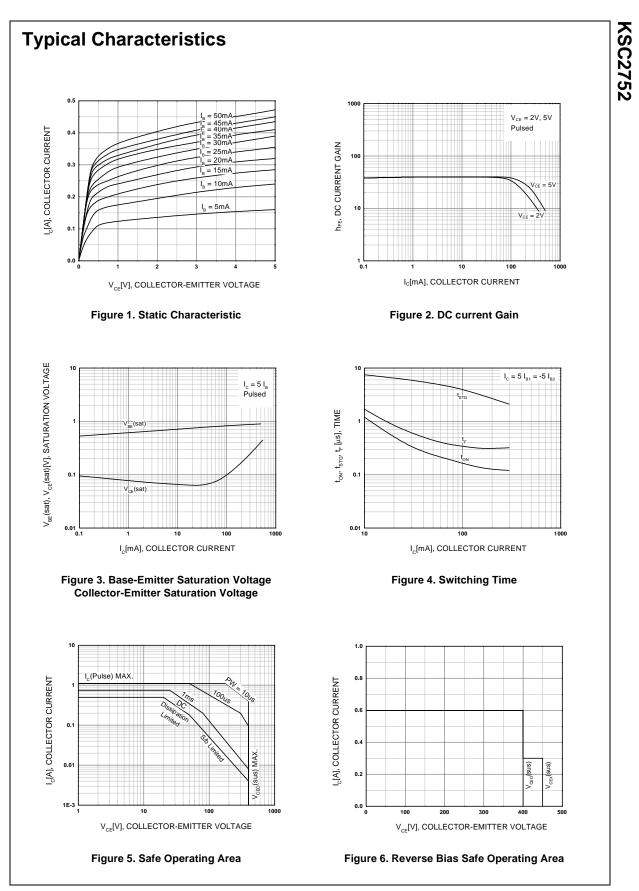
Symbol	Parameter	Test Condition	Min.	Max.	Units
V _{CEO} (sus)	Collector-Emitter Sustaining Voltage	I _C = 0.3A, I _{B1} = 0.06A, L = 10mH	400		V
V _{CEX} (sus)1	Collector-Emitter Sustaining Voltage	$I_{C} = 0.3A, I_{B1} = -I_{B2} = 0.06A$ $V_{BE}(off) = -5V, L = 10mH, Clamped$	450		V
V _{CEX} (sus)2	Collector-Emitter Sustaining Voltage	I _C = 0.6A, I _{B1} = 0.2A, I _{B2} = -0.06A V _{BE} (off) = -5V, L = 10mH, Clamped	400		V
I _{CBO}	Collector Cut-off Current	$V_{CB} = 400V, I_E = 0$		10	μA
I _{CER}	Collector Cut-off Current	$V_{CE} = 400V, R_{BE} = 51\Omega, T_{C} = 125^{\circ}C$		1	mA
I _{CEX1}	Collector Cut-off Current	$V_{CE} = 400V, R_{BE}(off) = -1.5V$		10	μΑ
I _{CEX2}	Collector Cut-off Current	V _{CE} = 400V, R _{BE} (off) = -1.5V @ T _C = 125°C		1	mA
I _{EBO}	Emitter Cut-off Current	$V_{EB} = 5V, I_{C} = 0$		10	μA
h _{FE1} h _{FE2}	* DC Current Gain	$V_{CE} = 5V, I_C = 0.05A$ $V_{CE} = 5V, I_C = 0.3A$	20 10	80	
V _{CE} (sat)	* Collector-Emitter Saturation Voltage	I _C = 0.3A, I _B = 0.06A		1	V
V _{BE} (sat)	* Base-Emitter Saturation Voltage	I _C = 0.3A, I _B = 0.06A		2	V
t _{ON}	Turn ON Time	$V_{CC} = 150V, I_{C} = 0.3A$		1	μs
t _{STG}	Storage Time	$I_{B1} = -I_{B2} = 0.06A, R_L = 500\Omega$		2.5	μs
t _F	Fall Time	PW = 50µs, Duty Cycle≤2%		1	μs

h_{FF} Classification

Classification	R	0	Y			
h _{FE1}	20 ~ 40	30 ~ 60	40 ~ 80			

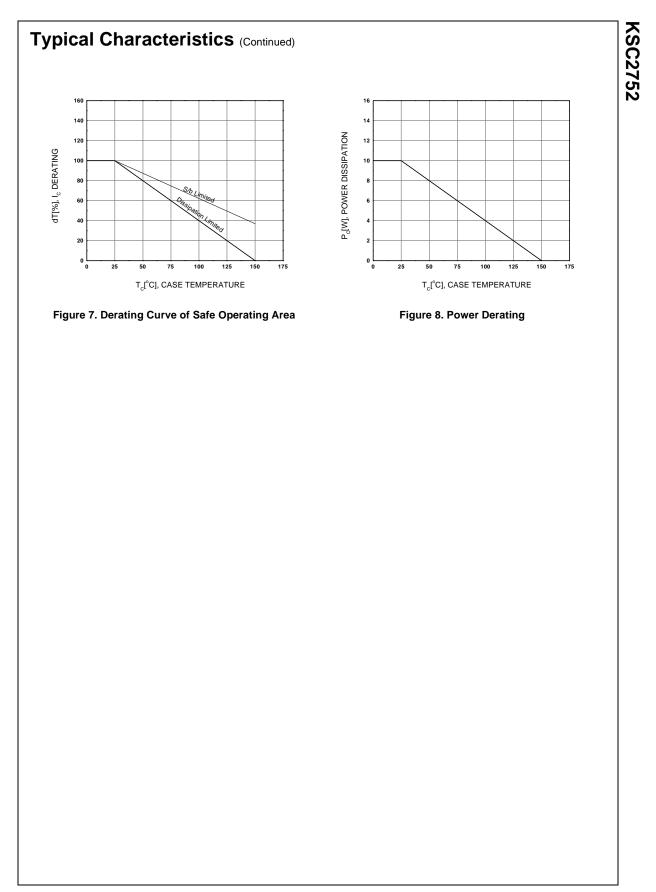
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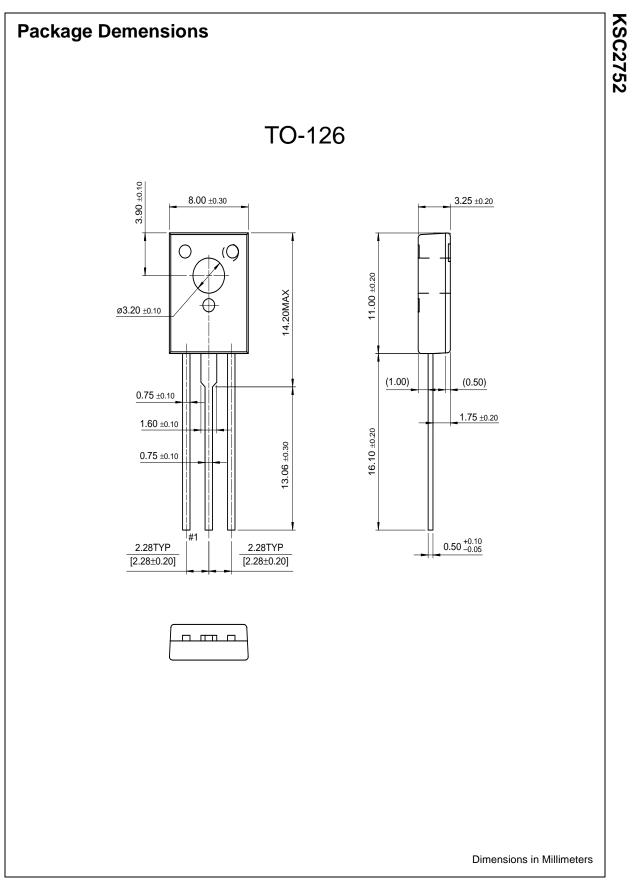
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