TIGER ELECTRONIC CO.,LTD

Product specification

NPN Epitaxial Silicon Transistor — KSC2334

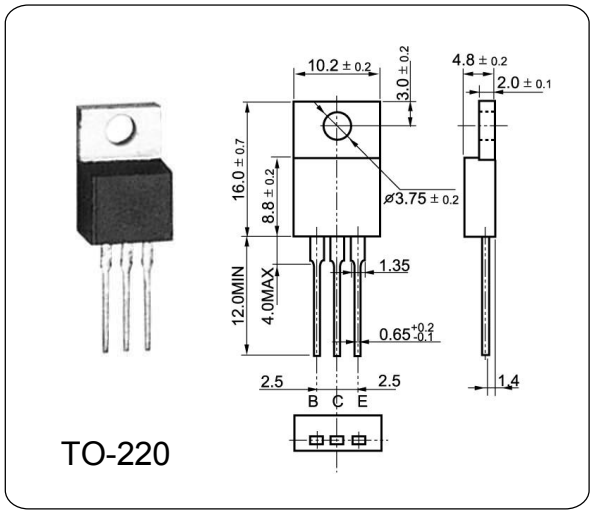
DESCRIPTION

High Speed Switching Industrial Use

◆ Complement to KSA1010

ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	150	V
Collector-Emitter Voltage	V_{CEO}	100	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	I_C	7.0	A
Base Current	I_B	3.5	A
Total Dissipation at	P_{tot}	40	W
Max. Operating Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~15 0	°C



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ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector Cut-off Current	I_{CEO}	V_{CB}=100V, I_E=0	—	—	10	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0	—	—	10	μA
Collector-Emitter Sustaining Voltage	V_{CEO}	I_C=30mA, I_B=0	100	—	—	V
DC Current Gain	$h_{FE(1)}$	V_{CE}=5.0V, I_C=0.5A	40	—	—	
	$h_{FE(2)}$	V_{CE}=5.0V, I_C=3.0A	40	—	240	
	$h_{FE(3)}$	V_{CE}=5.0V, I_C=5.0A	20	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=5.0A, I_B=500mA	—	—	0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=5.0A, I_B=500mA	—	—	1.5	V
Storage Time	t_S	I_{B1} = -I_{B2} = 0.5A R_L = 10Ω	—	0.5	—	μs

$h_{FE(2)}$ R: 40 ~ 80 O: 70 ~ 140 Y: 120 ~ 240