



NPN Epitaxial Silicon Transistor

KSC2334

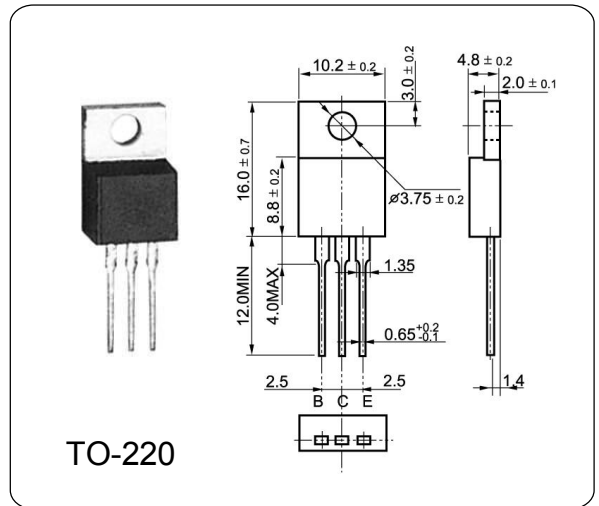
DESCRIPTION

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	-55~150	°C
Storage Temperature	T_{stg}	0	°C



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	$I_{B1} = -I_{B2} = 0.5A, R_L = 10 \Omega$	—	0.5	—	μs

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