

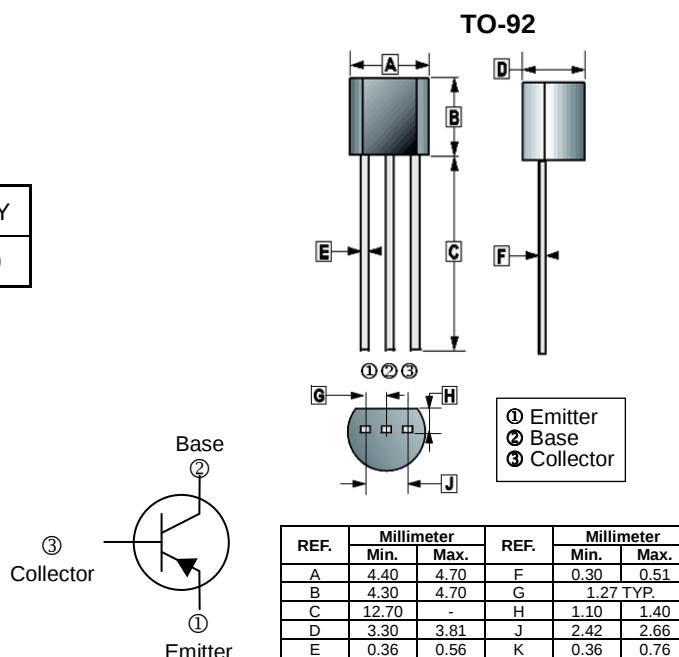
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURE

- Low Saturation Medium Current Application.
- Complementary to KSC815

CLASSIFICATION OF h_{FE}

Product-Rank	KSA539-R	KSA539-O	KSA539-Y
Range	40~80	70~140	120~240



ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CBO}	-60	V
Collector to Emitter Voltage	V_{CEO}	-45	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Current - Continuous	I_C	-200	mA
Collector Power Dissipation	P_C	400	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	312	$^\circ\text{C} / \text{W}$
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	-60	-	-	V	$I_C = -0.1\text{mA}, I_E = 0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	-45	-	-	V	$I_C = -10\text{mA}, I_B = 0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-	-	V	$I_E = -0.01\text{mA}, I_C = 0$
Collector Cut-Off Current	I_{CBO}	-	-	-0.1	μA	$V_{CB} = -45\text{V}, I_E = 0$
Emitter Cut-Off Current	I_{EBO}	-	-	-0.1	μA	$V_{EB} = -3\text{V}, I_C = 0$
DC Current Gain	h_{FE}	40	-	240		$V_{CE} = -1\text{V}, I_C = -50\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-0.5	V	$I_C = -150\text{mA}, I_B = -15\text{mA}$
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	-1.2	V	$I_C = -150\text{mA}, I_B = -15\text{mA}$
Base to Emitter Voltage	V_{BE}	-0.6	-	-0.9	V	$V_{CE} = -1\text{V}, I_C = -10\text{mA}$