

isc Silicon NPN Power Transistor

KSD5075T

DESCRIPTION

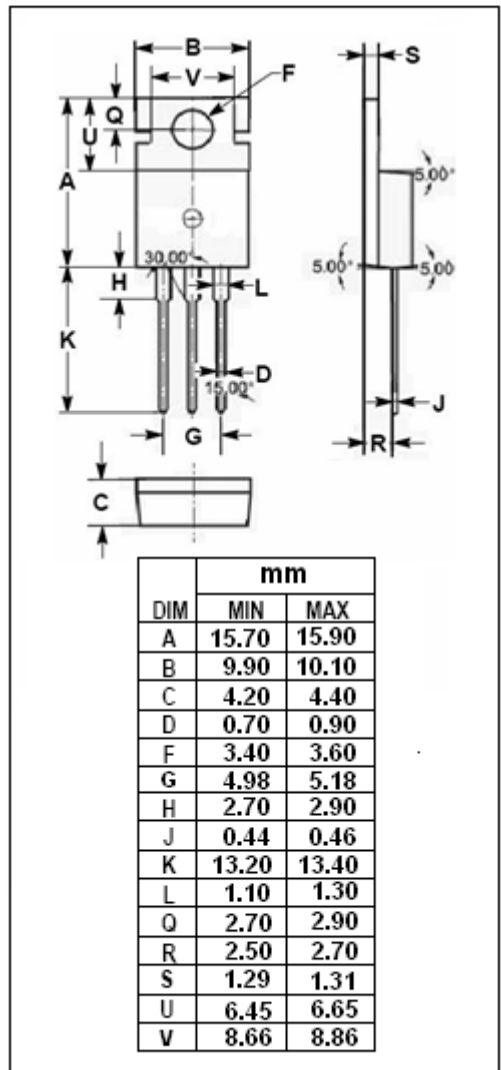
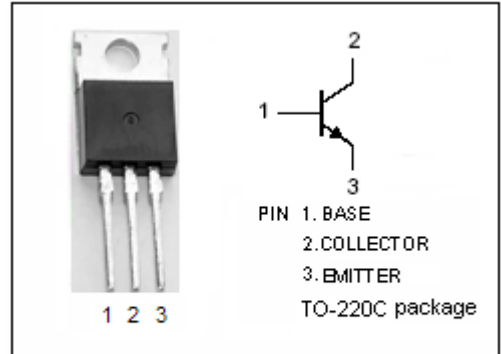
- High Breakdown Voltage-
: $V_{CBO} = 1500V$ (Min)
- High Switching Speed
- High Reliability

APPLICATIONS

- Electronic ballast application
- High voltage switching application

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current- Continuous	3.5	A
I_{CP}	Collector Current-Peak	10	A
P_C	Collector Power Dissipation @ $T_c=25^{\circ}C$	75	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



isc Silicon NPN Power Transistor**KSD5075T****ELECTRICAL CHARACTERISTICS**T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 2.5A; I _B = 0.8A			8.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 2.5A; I _B = 0.8A			1.5	V
I _{CB0}	Collector Cutoff Current	V _{CB} = 800V ; I _E = 0			10	μ A
I _{EB0}	Emitter Cutoff Current	V _{EB} = 5V ; I _C = 0			1	mA
h _{FE}	DC Current Gain	I _C = 0.5A ; V _{CE} = 5V	8			
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} = 10V		3		MHz
t _f	Fall Time	I _C = 3A , I _{B1} = 0.8A ; I _{B2} = -1.6A R _L = 66.7 Ω ; V _{CC} = 200V			0.4	μ s