

isc Silicon NPN Darlington Power Transistor

2SD2422

DESCRIPTION

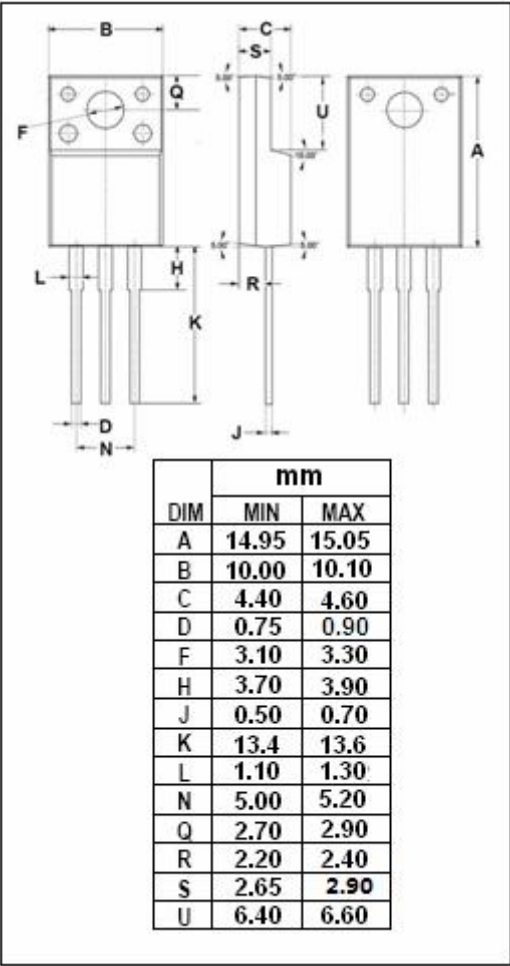
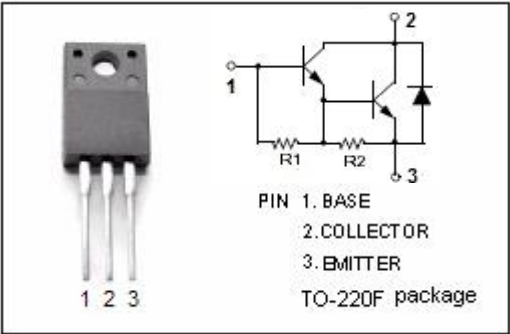
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 100V(\text{Min})$
- Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = 1.5V(\text{Max.}) @ I_C = 3A$
- High DC Current Gain
: $h_{FE} = 1000(\text{Min}) @ I_C = 2A, V_{CE} = 3V$

APPLICATIONS

- High power switching applications
- Hammer driver, pulse motor driver applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	7	A
I_{CM}	Collector Current-Peak	10	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}C$	30	W
	Collector Power Dissipation @ $T_a=25^{\circ}C$	2.0	
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



isc Silicon NPN Darlington Power Transistor**2SD2422****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 5mA; I _B = 0	100			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 50 μ A; I _E = 0	100			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 3mA; I _C = 0	6			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 3A; I _B = 6mA			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 3A; I _B = 6mA			2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 100V; I _E = 0			10	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C = 0			3.0	mA
h _{FE}	DC Current Gain	I _C = 2A; V _{CE} = 3V	1000		20000	