

isc Silicon NPN Power Transistor

2SD1175

DESCRIPTION

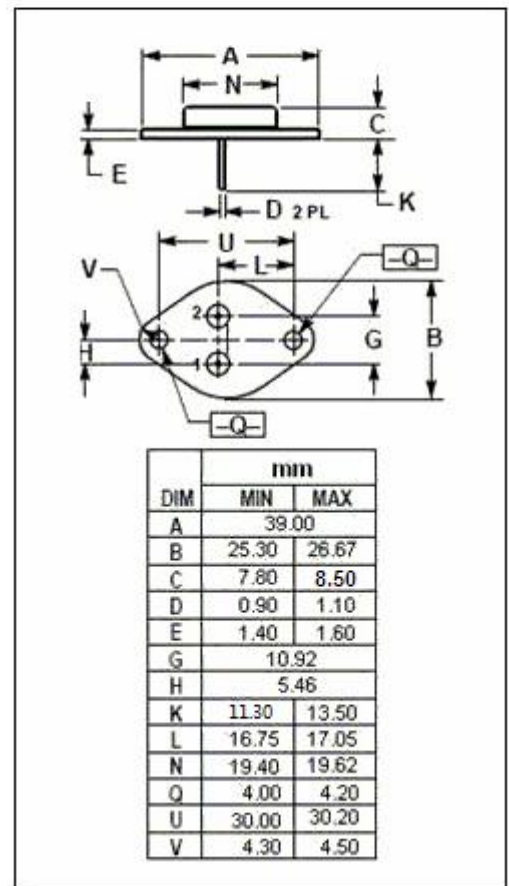
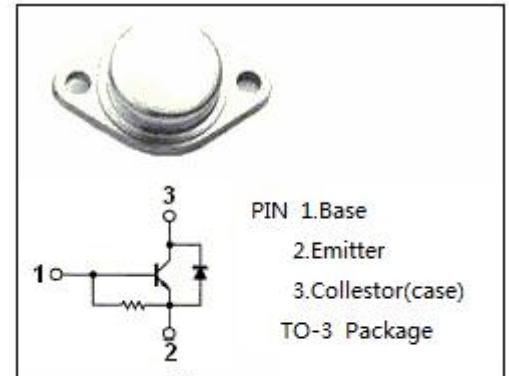
- High Breakdown Voltage-
: $V_{CBO} = 1500V$ (Min)
- Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = 6.0V$ (Max.) @ $I_C = 5.0A$
- Built-in Damper Diode
- Wide area of safe operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for horizontal deflection output applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CES}	Collector- Emitter Voltage($V_{BE} = 0$)	1500	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current- Continuous	5	A
I_{CP}	Collector Current- Peak	8	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ C$	100	W
T_J	Junction Temperature	130	$^\circ C$
T_{stg}	Storage Temperature Range	-65~130	$^\circ C$



isc Silicon NPN Power Transistor**2SD1175****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 500mA; I _C = 0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 5.0A; I _B = 1.0A			6.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 5.0A; I _B = 1.0A			1.5	V
I _{CBO}	Collector Base Cutoff Current	V _{CB} =750V; I _E = 0			50	uA
		V _{CB} =1500V; I _E = 0			1	mA
h _{FE}	DC Current Gain	I _C = 5A; V _{CE} = 10V	6		20	
V _{ECF}	C-E Diode Forward Voltage	I _F = 5A			2.5	V

Switching Times

t _{stg}	Storage Time	I _C = 5A, I _{B1} = I _{B2} = 1A			12	μ s
t _f	Fall Time				0.7	μ s

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