

isc Silicon PNP Darlington Power Transistor
2N6648
DESCRIPTION

- With TO-3 packaging
- Built-in base-emitter shunt resistors
- Very high DC current gain
- Complement to type 2N6648
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

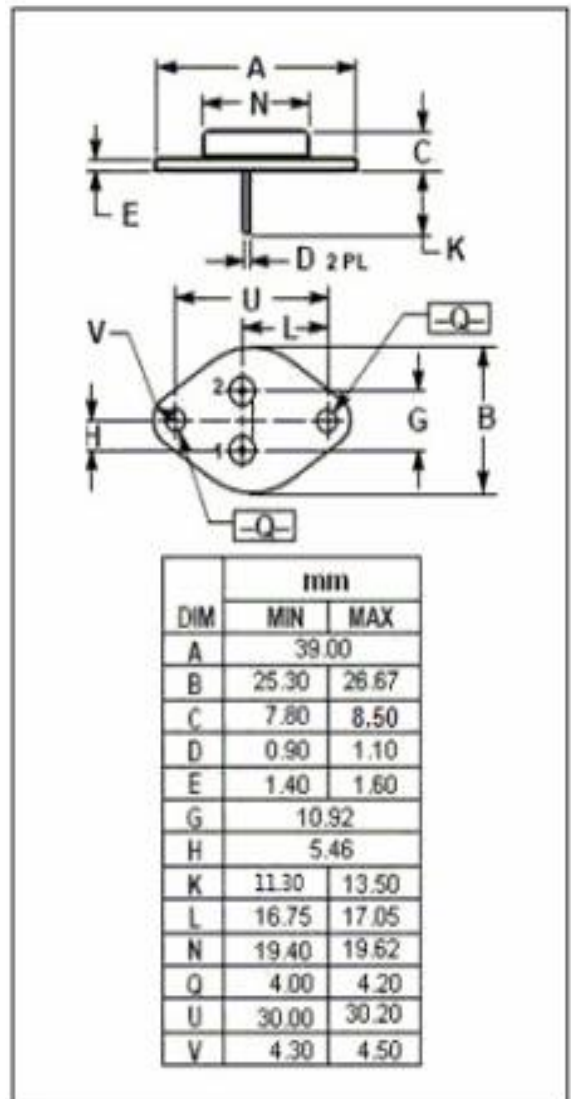
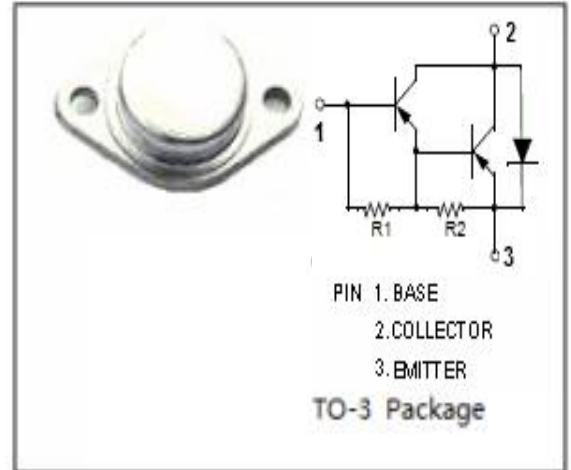
- Electronic ignition
- Alternator regulator
- Motor controls
- Power switching
- Hammer drivers

ABSOLUTE MAXIMUM RATINGS(T_C=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	-40	V
V _{CEO}	Collector-Emitter Voltage	-40	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-10	A
I _{CM}	Collector Current-Peak	-15	A
I _B	Base Current	-0.25	A
P _C	Collector Power Dissipation@T _C =25°C	100	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	ThermalResistance, Junction to Case	1.75	°C/W



isc Silicon PNP Darlingtion Power Transistor**2N6648****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CE(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C=-50\text{mA}$; $I_B=0$	-40		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C=-5\text{A}$; $I_B=-10\text{mA}$		-2.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C=-10\text{A}$; $I_B=-100\text{mA}$		-3.0	V
$V_{BE(on)-1}$	Base-Emitter On voltage	$I_C=-5\text{A}$; $V_{CE}=-3\text{V}$		-2.8	V
$V_{BE(on)-2}$	Base-Emitter On voltage	$I_C=-10\text{A}$; $V_{CE}=-3\text{V}$		-4.5	V
I_{CEO}	Collector Cutoff current	$V_{CE}=-40\text{V}$; $I_B=0$		-1.0	mA
I_{EBO}	Emitter Cut-off current	$V_{EB}=-5\text{V}$; $I_C=0$		10	mA
h_{FE-1}	DC Current Gain	$I_C=-5\text{A}$; $V_{CE}=-3\text{V}$	1000	20000	
h_{FE-2}	DC Current Gain	$I_C=-10\text{A}$; $V_{CE}=-3\text{V}$	100		
C_{OB}	Output Capacitance	$I_E=0$; $V_{CB}=-10\text{V}$; $f_{test}=1.0\text{MHz}$		200	pF

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