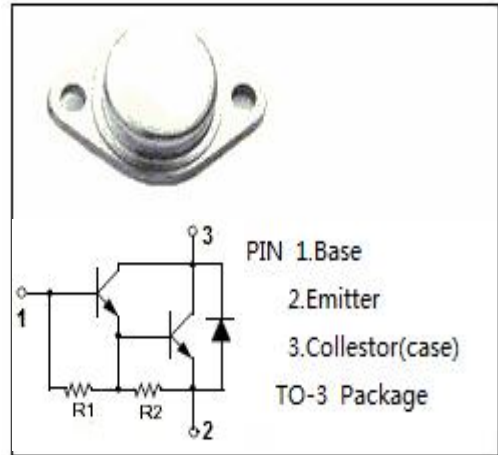


isc Silicon NPN Darlington Power Transistor
BDX67/A/B/C
DESCRIPTION

- High DC Current Gain-
: $h_{FE} = 1000(\text{Min}) @ I_C = 10A$
- Low Saturation Voltage
- Complement to Type BDX66/A/B/C
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

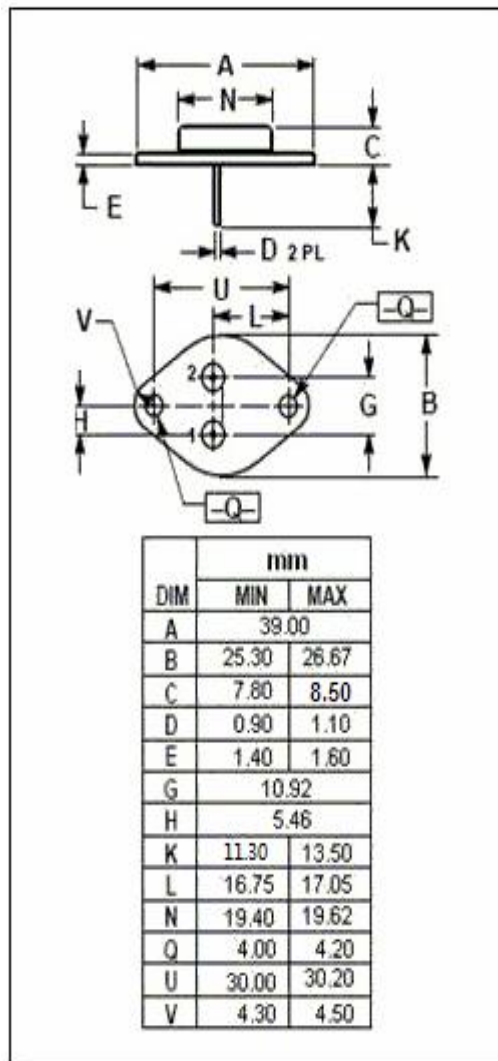
- Designed for audio output stages and general amplifier and switching applications


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

SYMBOL	PARAMETER	VALUE	UNIT	
V_{CBO}	Collector-Base Voltage	BDX67	80	V
		BDX67A	100	
		BDX67B	120	
		BDX67C	140	
V_{CEO}	Collector-Emitter Voltage	BDX67	60	V
		BDX67A	80	
		BDX67B	100	
		BDX67C	120	
V_{EBO}	Emitter-Base Voltage	5	V	
I_C	Collector Current-Continuous	16	A	
I_{CM}	Collector Current-Peak	20	A	
I_B	Base Current	250	mA	
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	150	W	
T_J	Junction Temperature	200	$^\circ\text{C}$	
T_{stg}	Storage Temperature Range	-65~200	$^\circ\text{C}$	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.17	$^\circ\text{C/W}$



isc Silicon NPN Darlington Power Transistor
BDX67/A/B/C
ELECTRICAL CHARACTERISTICS

 T_C=25°C unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	BDX67	I _C = 50mA ; L= 25mH				V
		BDX67A					
		BDX67B					
		BDX67C					
V _{CE(sat)}	Collector-Emitter Saturation Voltage		I _C = 10A; I _B = 40mA			2.0	V
V _{BE(on)}	Base-Emitter On Voltage		I _C = 10A; V _{CE} = 3V			2.5	V
I _{CBO}	Collector Cutoff Current	BDX67	V _{CB} = 80V; I _E = 0 V _{CB} = 80V; I _E = 0; T _C =150°C			1.0 5.0	mA
		BDX67A	V _{CB} = 100V; I _E = 0 V _{CB} = 100V; I _E = 0; T _C =150°C			1.0 5.0	
		BDX67B	V _{CB} = 120V; I _E = 0 V _{CB} = 120V; I _E = 0; T _C =150°C			1.0 5.0	
		BDX67C	V _{CB} = 140V; I _E = 0 V _{CB} = 140V; I _E = 0; T _C =150°C			1.0 5.0	
I _{CEO}	Collector Cutoff Current		V _{CE} = 1/2V _{CEO} (Max); I _B =0			1.0	mA
I _{EBO}	Emitter Cutoff Current		V _{EB} = 5V; I _C =0			5.0	mA
h _{FE-1}	DC Current Gain		I _C = 1A ; V _{CE} = 3V		5200		
h _{FE-2}	DC Current Gain		I _C = 10A ; V _{CE} = 3V	1000			
h _{FE-3}	DC Current Gain		I _C = 16A ; V _{CE} = 3V		4000		
V _{ECF}	C-E Diode Forward Voltage		I _F = 10A		2.5		V
C _{OB}	Output Capacitance		I _E = 0 ; V _{CB} = 10V, f _{test} = 1.0MHz		300		pF

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