



isc Silicon NPN Darlington Power Transistor

DESCRIPTION

- · High DC Current Gain-
 - : h_{FE} = 2000(Min)@ (V_{CE} = 2V, I_{C} = 2A)
- · Large Current Capability and Wide ASO.
- Complement to Type 2SB1223
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

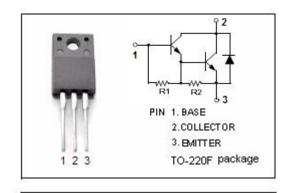


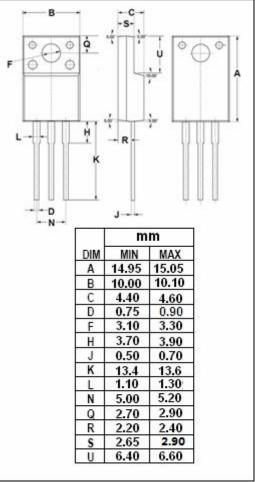
APPLICATIONS

 Designed for use in control of motor drivers, printer hammer drivers, and constant-voltage regulators.

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT	
V _{CBO}	Collector-Base Voltage	70	V	
Vceo	Collector-Emitter Voltage	60	V	
V_{EBO}	Emitter-Base Voltage	6	V	
lc	Collector Current-Continuous	4	А	
Ісм	Collector Current-Peak	6	А	
Pc	Collector Power Dissipation @T _a =25℃	2	W	
	Collector Power Dissipation @T _C =25℃	20		
TJ	Junction Temperature	150	$^{\circ}$	
T _{stg}	Storage Temperature	-55~150	$^{\circ}$ C	







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2SD1825

ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 30mA; R _{BE} = ∞	60			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I _C = 5mA; I _E = 0	70			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 2A; I _B = 4mA			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 2A; I _B = 4mA			2.0	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 40V; I _E = 0			100	μ А
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			3.0	mA
h _{FE}	DC Current Gain	I _C = 2A; V _{CE} = 2V	2000	4000		
f _T	Current-Gain—Bandwidth Product	I _C = 2A; V _{CE} = 5V		20		MHz

NOTICE:

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