

isc Silicon NPN Power Transistor

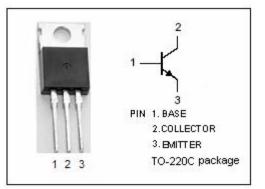
MJE3055T

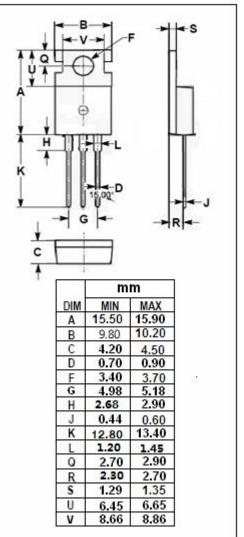
DESCRIPTION

- Collector-Emitter Breakdown Voltage-
 - : $V_{(BR)CEO} = 60V(Min)$
- High DC Current Gain-
 - : h_{FE}= 20-100@I_C= 4A
- Complement to Type MJE2955T
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

• Designed for use in general-purpose amplifier and switching applications.





ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	70	V
V _{CEO}	Collector-Emitter Voltage	60	V
VEBO	Emitter-Base Voltage 5		V
Ic	Collector Current-Continuous	10	А
I _B	Base Current-Continuous	6	А
Pc	Collector Power Dissipation @ $T_c=25^{\circ}C$	75	W
TJ	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
Rth j-c	R _{th j-c} Thermal Resistance,Junction to Case		°C /W

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MJE3055T

ELECTRICAL CHARACTERISTICS

 $T_c=25^{\circ}C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР.	МАХ	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 50mA; I _B = 0	60			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 4A; I _B = 0.4A			1.1	V
V _{CE(sat)} -2	Collector-Emitter Saturation Voltage	I _C = 10A; I _B = 3.3A			8.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 4A ; V _{CE} = 4V			1.8	V
I _{CEO}	Collector Cutoff Current	V _{CE} = 30V; I _B = 0			0.7	mA
І _{сво}	Collector Cutoff Current	V _{CB} = 70V; I _E = 0 V _{CB} = 70V; I _E = 0; T _C = 150℃			1.0 10	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			5.0	mA
h _{FE-1}	DC Current Gain	I _C = 4A ; V _{CE} = 4V	20		100	
h _{FE-2}	DC Current Gain	I _C = 10A ; V _{CE} = 4V	5			
f⊤	Current Gain-Bandwidth Product	I _C = 0.5A; V _{CE} = 10V; f= 500kHz	2.0			MHz

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