

isc Silicon PNP Power Transistor

MJD2955

DESCRIPTION

- Excellent Safe Operating Area
- Collector-Emitter Saturation Voltage-
: $V_{CE(sat)} = -1.1 \text{ V(Max)} @ I_C = -4\text{A}$
- Complement to Type MJD3055
- DPAK for Surface Mount Applications
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

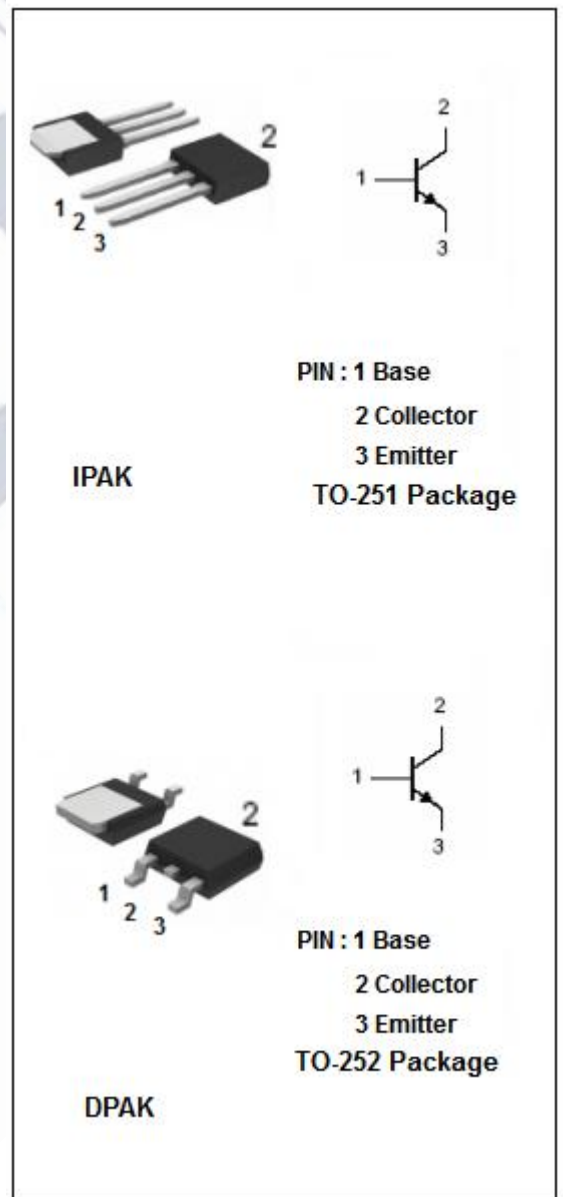
- Designed for general-purpose switching and amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-70	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-10	A
I_B	Base Current	-6	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	20	W
	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	1.75	
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	6.25	$^\circ\text{C/W}$
$R_{th\ j-a}$	Thermal Resistance, Junction to Ambient	71.4	$^\circ\text{C/W}$



isc Silicon PNP Power Transistors**MJD2955****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C = -30\text{mA}; I_B = 0$	-60		V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C = -4\text{A}; I_B = -0.4\text{A}$		-1.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C = -10\text{A}; I_B = -3.3\text{A}$		-8.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -4\text{A}; V_{CE} = -4\text{V}$		-1.8	V
I_{CEO}	Collector Cutoff Current	$V_{CE} = -30\text{V}; I_B = 0$		-50	μA
I_{CBO}	Collector Cutoff Current	$V_{CB} = -100\text{V}; I_E = 0$		-0.02	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -5\text{V}; I_C = 0$		-0.5	mA
h_{FE-1}	DC Current Gain	$I_C = -4\text{A}; V_{CE} = -4\text{V}$	20	100	
h_{FE-2}	DC Current Gain	$I_C = -10\text{A}; V_{CE} = -4\text{V}$	5		
f_T	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}; V_{CE} = -10\text{V}$	2.0		MHz

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Outline Drawing

