

INCHANGE Semiconductor

isc Product Specification

isc Silicon NPN Power Transistor

2SC2716

DESCRIPTION

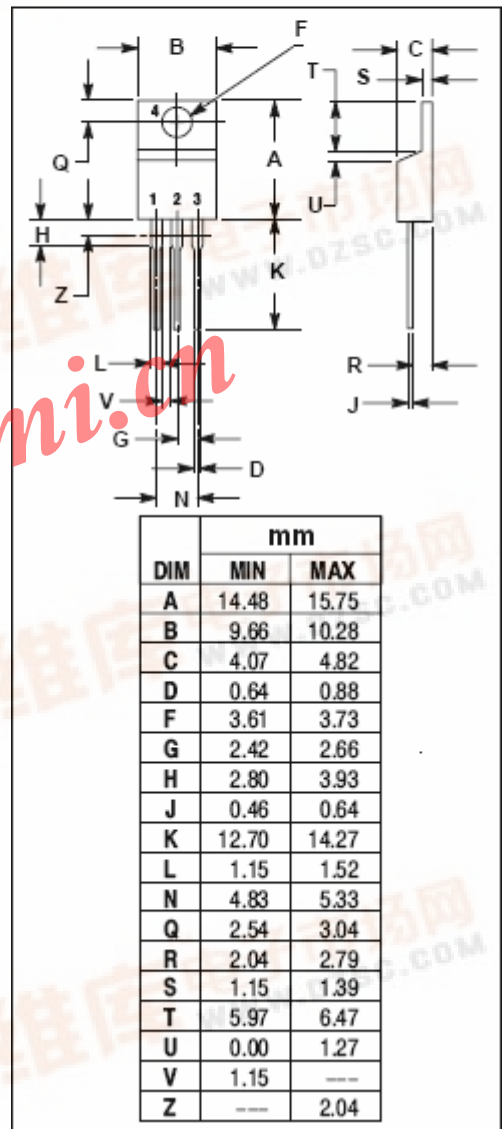
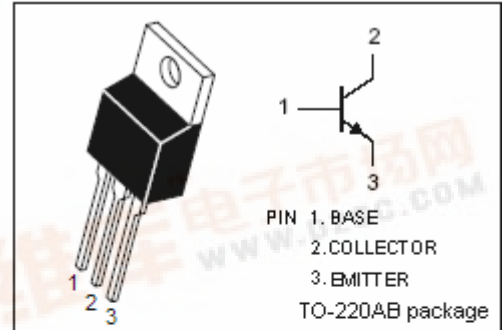
- High Power Gain-
: $G_p \geq 12\text{dB}$, $f = 27\text{MHz}$, $P_o = 16\text{W}$
- High Reliability

APPLICATIONS

- Designed for RF power amplifier applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_{CM}	Collector Current	6	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	20	W
	Collector Power Dissipation @ $T_a = 25^\circ\text{C}$	1.7	
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SC2716****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=2A; I_B=0.2A$			1.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=30V; I_E=0$			0.1	mA
I_{CEO}	Collector Cutoff Current	$V_{CE}=25V; I_B=0$			0.1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=4V; I_C=0$			0.1	mA
h_{FE}	DC Current Gain	$I_C=0.5A; V_{CE}=5V$	20		180	
P_O	Output Power	$V_{CC}=12V; P_{in}=1W, f=27\text{MHz}$	16	18		W
η	Power Efficiency		60	70		%

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