

isc Silicon NPN Darlington Power Transistor

2SD2237

DESCRIPTION

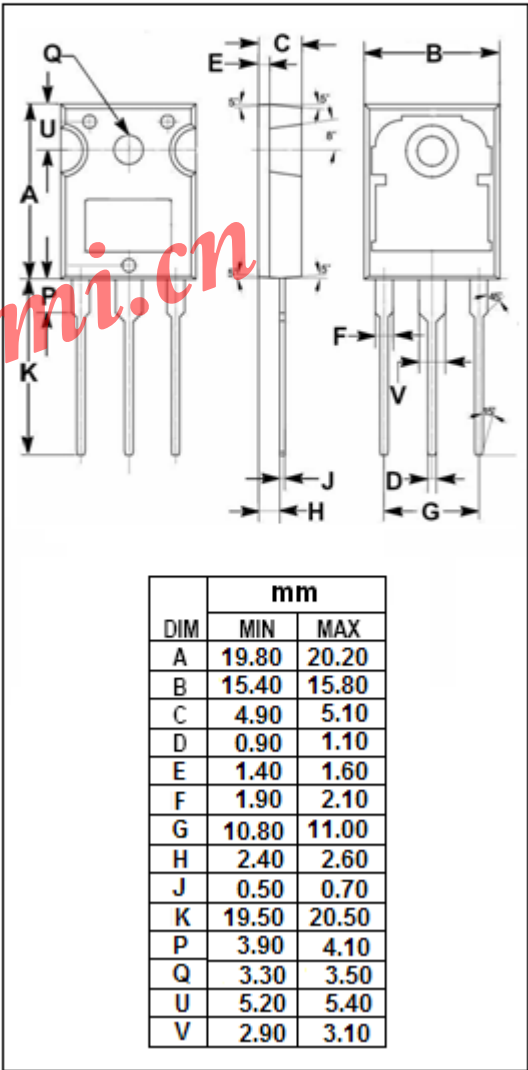
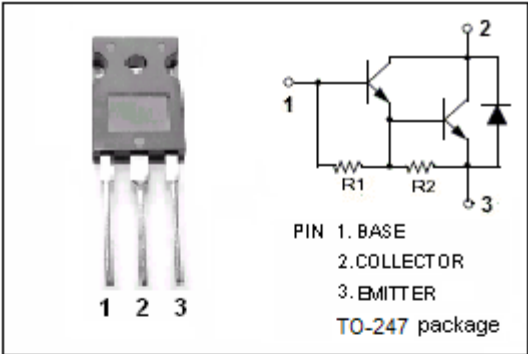
- High DC Current Gain-
: $h_{FE} = 2000(\text{Min}) @ I_C = 2A$
- Low Collector Saturation Voltage-
: $V_{CE(\text{sat})} = 2.0V(\text{Max.}) @ I_C = 5A$
- Complement to Type 2SB1478

APPLICATIONS

- Designed for power linear and switching applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	8	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}\text{C}$	60	W
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=10\text{mA}$, $I_B=0$	100			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C=50\mu\text{A}$; $I_E=0$	100			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=2\text{mA}$; $I_C=0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=5\text{A}$, $I_B=20\text{mA}$			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=5\text{A}$, $I_B=20\text{mA}$			2.5	V
I_{CBO}	Collector Cutoff current	$V_{CB}=100\text{V}$, $I_E=0$			10	μA
I_{EBO}	Emitter Cutoff current	$V_{EB}=5\text{V}$, $I_C=0$			2	mA
h_{FE}	DC Current Gain	$I_C=2\text{A}$; $V_{CE}=3\text{V}$	2000		20000	