

**isc Silicon NPN Power Transistor**
**2SC3588-Z**
**DESCRIPTION**

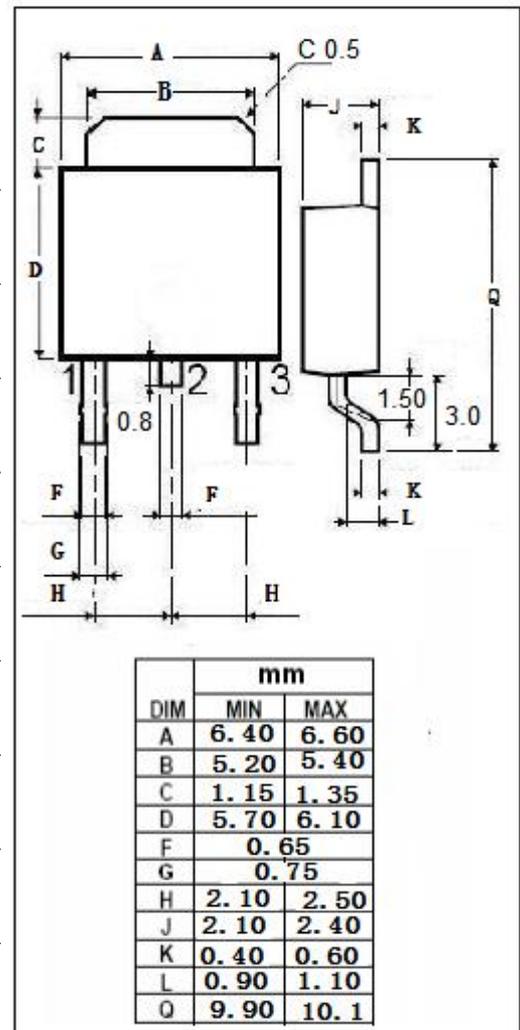
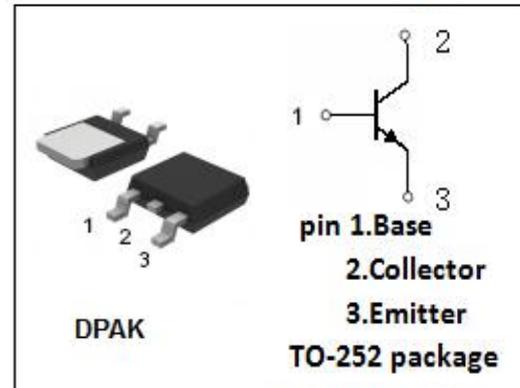
- Low Collector Saturation Voltage-  
 $V_{CE(sat)} = 0.5V(\text{Max}) @ I_C = 300\text{mA}$
- High Collector-Emitter Breakdown Voltage-  
 $V_{(BR)CEO} = 400V(\text{Min})$
- Complement to Type 2SA1400-Z
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Designed for high Voltage switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	500	V
$V_{CEO}$	Collector-Emitter Voltage	400	V
$V_{EBO}$	Emitter-Base Voltage	7	V
$I_C$	Collector Current-Continuous	0.5	A
$I_{CM}$	Collector Current-Pulse	1	A
$P_C$	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	2	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<sub>c</sub>=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 10mA ; I <sub>B</sub> = 0	400			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 300mA; I <sub>B</sub> = 60mA			0.5	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 300mA; I <sub>B</sub> = 60mA			1.0	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 400V; I <sub>E</sub> = 0			10	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V; I <sub>C</sub> = 0			10	μ A
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = 50mA ; V <sub>CE</sub> = 5V	20		80	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = 0.3A ; V <sub>CE</sub> = 5V	10			

**◆ h<sub>FE</sub> Classifications**

M	L	K
20-40	30-60	40-80

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