



**BKC International
Electronics Inc.**

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GERMANIUM GOLD BONDED DIODES

BKC 2000

APPLICATIONS

Designed specifically to be used with state of the art technology where power sources are limited.

Examples include—

- clamping diodes used with microprocessors
- signal transfer in detection circuits
- small signal switching as in telecommunication circuits

FEATURES

Low forward voltage drop

—low power consumption

Thirty years of proven reliability

—one million hours mean time between failures (MTBF)

Very low noise level

Metallurgically bonded

**ABSOLUTE
MAXIMUM
RATINGS**

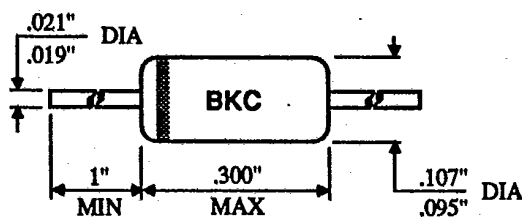
(@ 25 °C unless otherwise specified)

Peak Inverse Voltage	15 V
Peak Forward Current	500 ma
Operating Temperature Range	-65 °C to 85 °C
Average Power Dissipation	80 mW

**ELECTRICAL
CHARACTERISTICS**

	Symbol	Conditions	Min.	Max.	Unit	T °C
Peak Inverse Voltage	PIV	100ua	15		V	25
Inverse Current	I _r	5volts		5	ua	25
Forward Voltage	V _f	0.5ma		.25	V	25
Forward Voltage	V _f	1ma		.30	V	25
Forward Voltage	V _f	2ma		.35	V	25
Forward Voltage	V _f	5ma		.40	V	25
Capacitance	C	0.5volts		1.0	pf	25

MECHANICAL



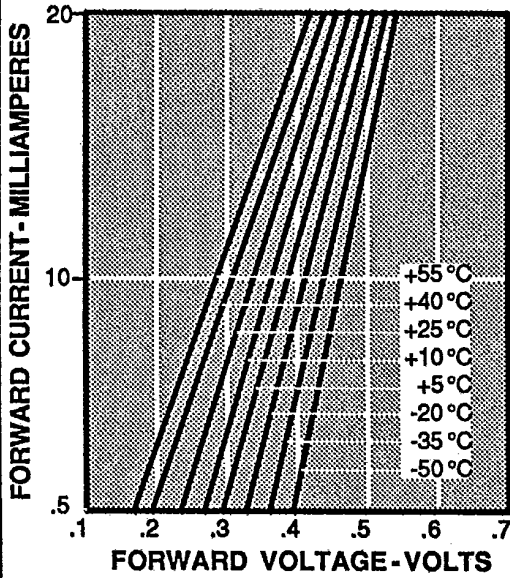
Passes all mechanical and environmental requirements of MIL-S-19500, including shock and vibration.

Marking can be either by color band or digital printing.

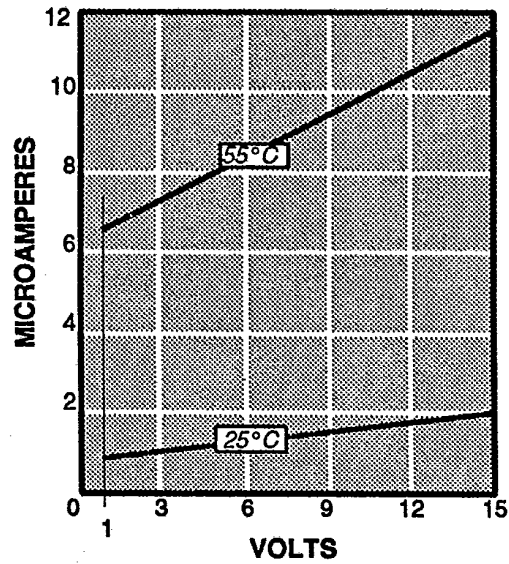
Dynamic Specifications

(typical)

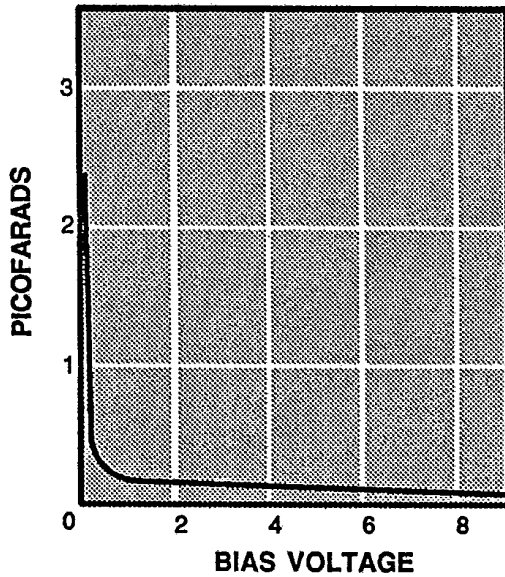
Forward Voltage vs. Temperature



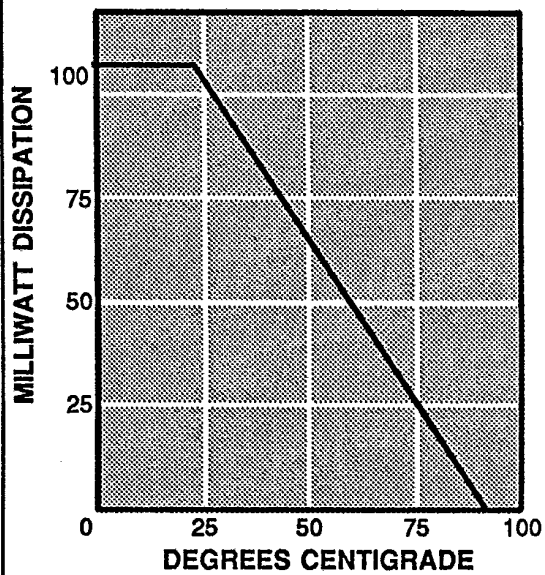
Reverse Bias Characteristics



Capacitance at 25 °C



Thermal Derating



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BKC ENGINEERING DATA SHEET
 FOR
 TYPE NUMBER
 G1594
 GOLD BONDED GERMANIUM DIODE

 ABSOLUTE MAXIMUM RATINGS

PEAK INVERSE VOLTAGE	35V
PEAK FORWARD CURRENT	500mA
POWER DISSIPATION	80mW
OPERATING TEMPERATURE RANGE	-65C TO +85C

 ELECTRICAL CHARACTERISTICS

PARAMETER	VF	VF	VF	IR	PIV
COND	0.1mA	1.0mA	10mA	30V	1mA
TA	25C	25C	25C	25C	25C
LIMIT					
MIN	----	----	----	----	35V
MAX	.200V	.300V	.440V	50uA	----

 PACKAGE CONFIGURATION

GLASS CASE JEDEC DO-7
 (INCHES)

LEAD DIAMETER	.018-.022
BODY DIAMETER	.107 MAX
LEAD LENGTH	1.00 MIN
BODY LENGTH	.300 MAX

 MARKING

BLACK CATHODE BAND & BLACK DIGITAL PRINT

G1594 BKC
