

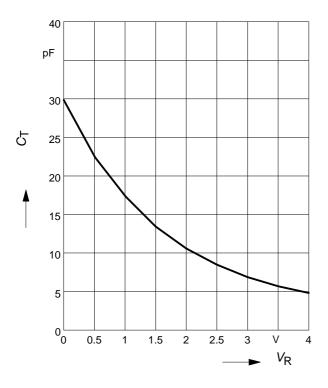
Electrical Characteristics at $T_A = 25$ °C, unless otherwise specified

Parameter	Symbol		Values			
		min.	typ.	max.		
DC Characteristics	·	•				
Reverse current	I _R				nA	
V_{R} = 8 V		-	-	10		
$V_{R} = 8 \text{ V}, T_{A} = 85 ^{\circ}\text{C}$		-	-	100		
AC Characteristics						
Diode capacitance	C _T				pF	
$V_R = 1 \text{ V}, f = 1 \text{ MHz}$		16.5	17.5	18.6		
$V_{R} = 2.5 \text{ V}, f = 1 \text{ MHz}$		-	9.35	-		
$V_{R} = 3 \text{ V}, f = 1 \text{ MHz}$		-	7	-		
$V_{R} = 4 V, f = 1 MHz$		4	4.7	5.5		
Capacitance ratio	C _{T1} /C _{T3}	-	2.45	-		
$V_{R} = 1 \text{ V}, V_{R} = 3 \text{ V}, f = 1 \text{ MHz}$						
Capacitance ratio	$C_{\text{T1}}/C_{\text{T4}}$	3	3.7	4.5		
$V_{R} = 1 \text{ V}, V_{R} = 4 \text{ V}, f = 1 \text{ MHz}$						
Series resistance	r _S				Ω	
V_{R} = 1 V, f = 470 MHz, BBY57-02L		-	0.35	-		
$V_R = 1 \text{ V}, f = 470 \text{ MHz}, \text{ all others}$		_	0.3	_		



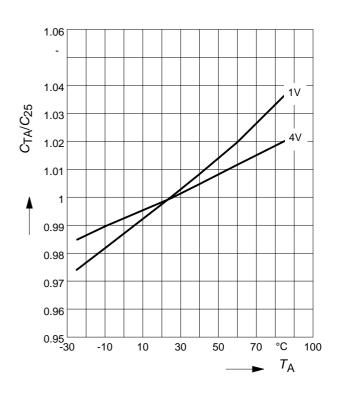
Diode capacitance $C_T = f(V_R)$

f = 1MHz

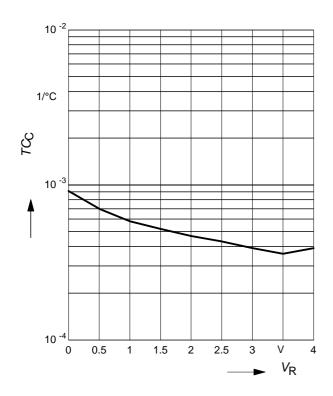


Normalized diode capacitance

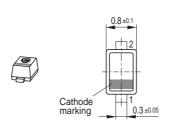
 $C_{(TA)}/C_{(25^{\circ}C)} = f(T_{A}); f = 1MHz$

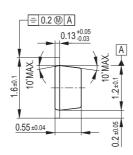


Temperature coefficient of the diode capacitance $T_{Cc} = f(V_R)$





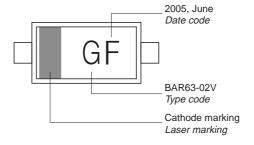




Foot Print



Marking Layout (Example)

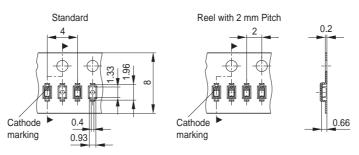


Standard Packing

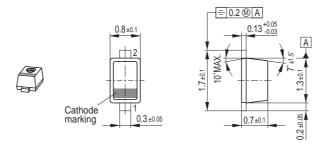
Reel ø180 mm = 3.000 Pieces/Reel

Reel ø180 mm = 8.000 Pieces/Reel (2 mm Pitch)

Reel ø330 mm = 10.000 Pieces/Reel



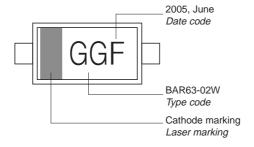




Foot Print



Marking Layout (Example)

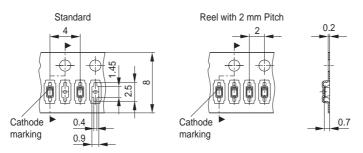


Standard Packing

Reel ø180 mm = 3.000 Pieces/Reel

Reel ø180 mm = 8.000 Pieces/Reel (2 mm Pitch)

Reel ø330 mm = 10.000 Pieces/Reel



5 2007-04-20



Date Code marking for discrete packages with one digit (SCD80, SC79, SC75¹⁾) CES-Code

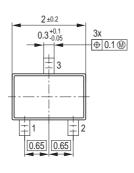
Month	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
01	а	р	Α	Р	а	р	Α	Р	а	р	Α	Р
02	b	q	В	Q	b	q	В	Q	b	q	В	Q
03	С	r	С	R	С	r	С	R	С	r	С	R
04	d	S	D	S	d	S	D	S	d	S	D	S
05	е	t	Е	Т	е	t	Е	Т	е	t	Е	Т
06	f	u	F	U	f	u	F	U	f	u	F	U
07	g	٧	G	V	g	٧	G	٧	g	٧	G	V
08	h	Х	Н	Х	h	Х	Н	Χ	h	Х	Н	Х
09	j	у	J	Υ	j	у	J	Υ	j	У	J	Y
10	k	Z	K	Z	k	Z	K	Z	k	Z	K	Z
11	I	2	L	4	ı	2	L	4	I	2	L	4
12	n	3	N	5	n	3	N	5	n	3	N	5

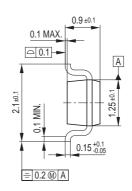
¹⁾ New Marking Layout for SC75, implemented at October 2005.

6 2007-04-20

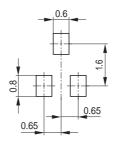




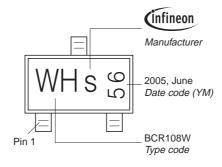




Foot Print

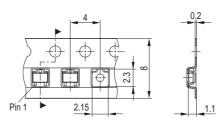


Marking Layout (Example)

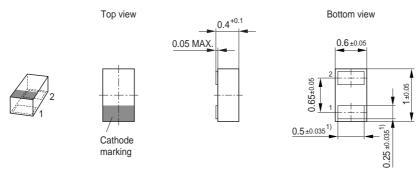


Standard Packing

Reel ø180 mm = 3.000 Pieces/Reel Reel ø330 mm = 10.000 Pieces/Reel



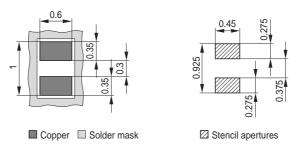




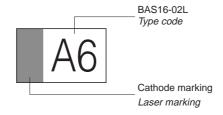
1) Dimension applies to plated terminal

Foot Print

For board assembly information please refer to Infineon website "Packages"

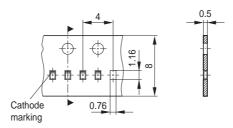


Marking Layout (Example)



Standard Packing

Reel ø180 mm = 15.000 Pieces/Reel Reel ø330 mm = 50.000 Pieces/Reel (optional)





Edition 2006-02-01 Published by Infineon Technologies AG 81726 München, Germany © Infineon Technologies AG 2007. All Rights Reserved.

Attention please!

The information given in this dokument shall in no event be regarded as a guarantee of conditions or characteristics ("Beschaffenheitsgarantie"). With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation warranties of non-infringement of intellectual property rights of any third party.

Information

For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office (www.infineon.com).

Warnings

Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies Office.

Infineon Technologies Components may only be used in life-support devices or systems with the express written approval of Infineon Technologies, if a failure of such components can reasonably be expected to cause the failure of that life-support device or system, or to affect the safety or effectiveness of that device or system.

Life support devices or systems are intended to be implanted in the human body, or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.