



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Product Summary

- $V_R = 60V$
- $I_F = 750mA$
- $I_R = 50\mu A$

Description and Applications

- DC – DC Converters
- Mobile Telecomms
- PCMIA

Features and Benefits

- High current capability ($I_F = 750mA$)
- Low V_F
- **Qualified to AEC-Q101 Standards for High Reliability**

Mechanical Data

- Case: SOT23
- Case Material: Molded Plastic, "Green" Molding Compound. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminals: Matte Tin Finish annealed over Alloy 42 leadframe (Lead Free Plating). Solderable per MIL-STD-202, Method 208
- Weight: 0.0089 grams (approximate)

SOT23



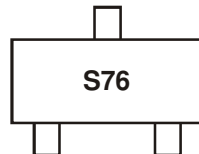
Top View

Ordering Information (Note 1)

Device	Packaging	Shipping
ZHCS756TA	SOT23	3000/Tape & Reel

Notes: 1. For Packaging Details, go to our website at <http://www.diodes.com>.

Marking Information



S76 = Product Type Marking Code

OBSOLETE - PART DISCONTINUED

Maximum Ratings @T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Units	
Continuous Reverse Voltage	V _R	60	V	
Continuous Forward Current	I _F	750	mA	
Forward Voltage @ I _F = 750mA	V _F	610	mV	
Average Peak Forward Current; D.C. = 50%	I _{FAV}	1500	mA	
Non Repetitive Forward Current	I _{FSM}	t ≤ 100μs	12	A
		t ≤ 10ms	5	A

Thermal Characteristics

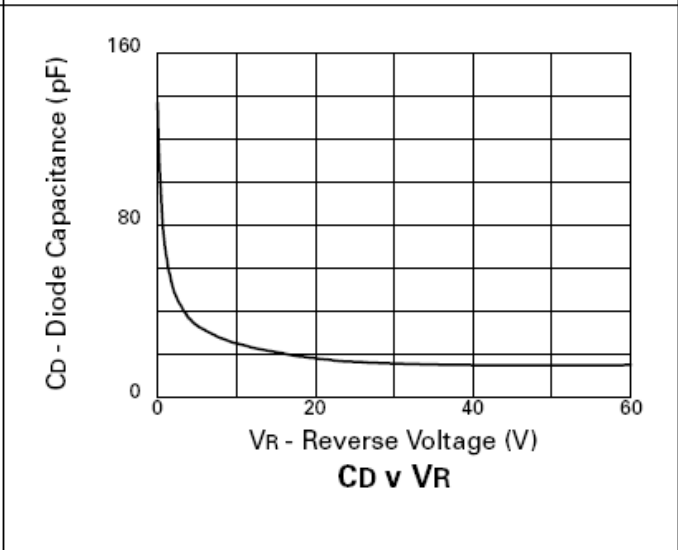
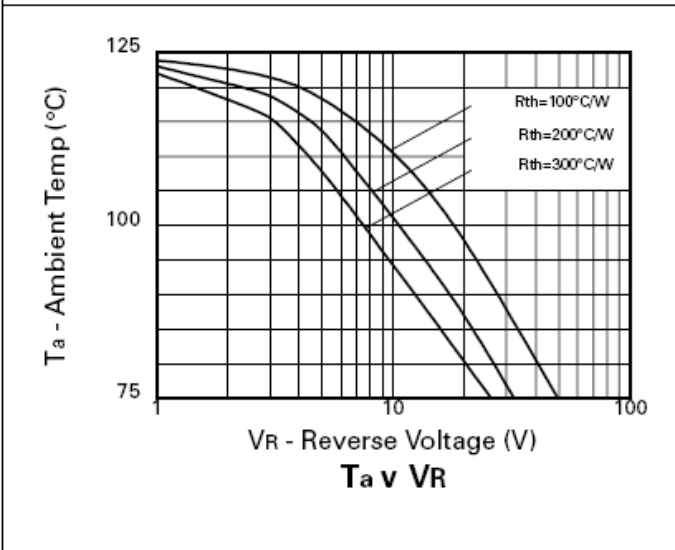
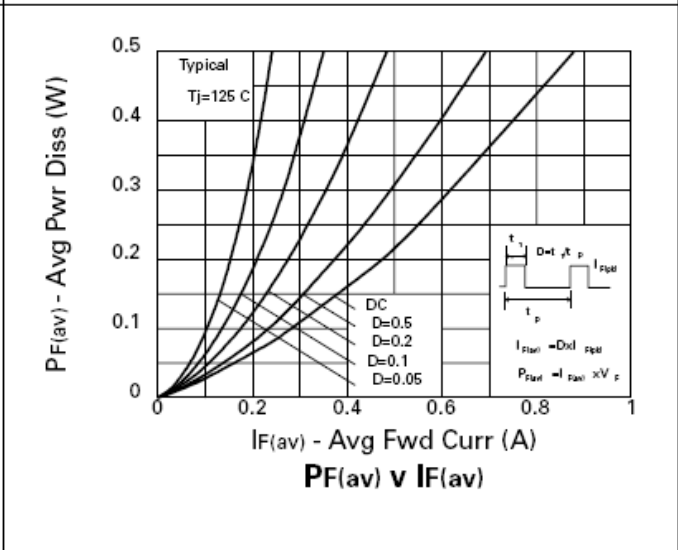
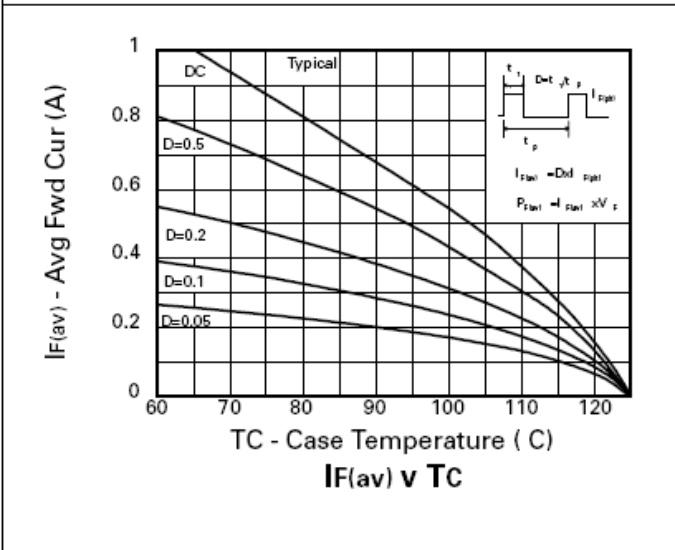
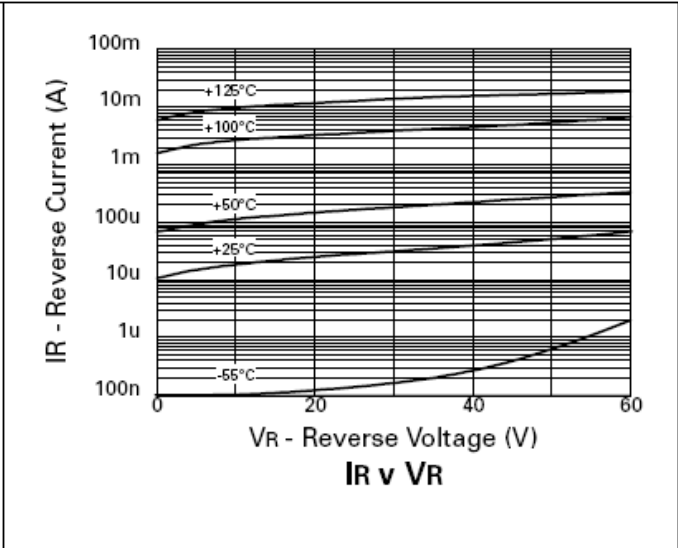
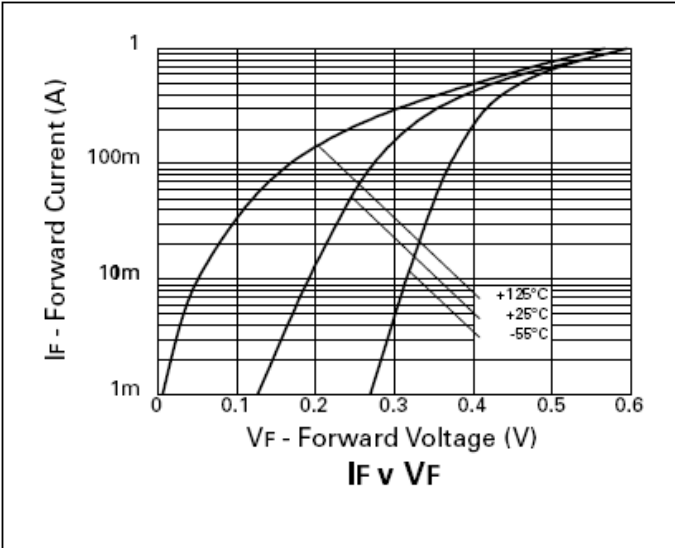
Characteristic	Symbol	Value	Unit
Power Dissipation, T _A = 25°C	P _D	500	mW
Junction Temperature	T _J	125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

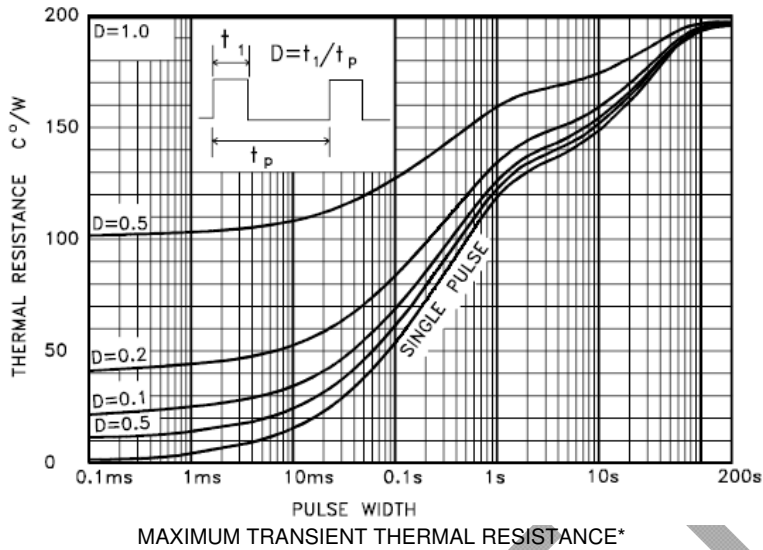
Electrical Characteristics @T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage	V _{(BR)R}	60	80	-	V	I _R = 300μA
Forward Voltage (Note 2)	V _F	-	250	290	mV	I _F = 50mA
		-	285	330		I _F = 100mA
		-	350	410		I _F = 250mA
		-	440	500		I _F = 500mA
		-	520	610		I _F = 750mA
		-	600	700		I _F = 1A
		-	760	900		I _F = 1.5A
Reverse Current	I _R	-	50	100	μA	V _R = 45V
Diode Capacitance	C _D	-	17	-	pF	f = 1MHz, V _R = 25V
Reverse Recovery Time	trr	-	12	-	ns	Switched from I _F = 500mA to I _R = 500mA Measured @ I _R = 50mA

Notes: 2. Measured under pulsed conditions. Pulse width = 300μs. Duty cycle ≤ 2%.

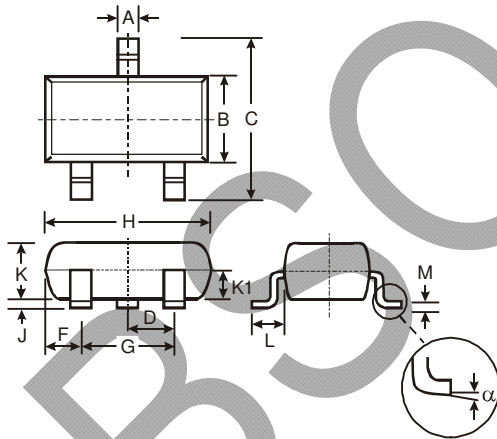
OBSOLETE - PART DISCONTINUED





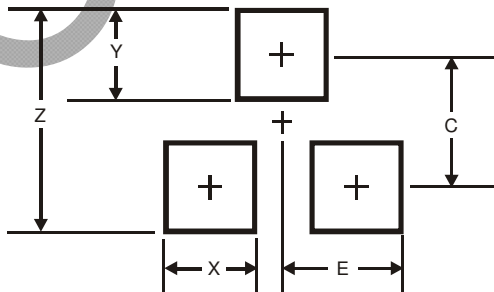
* Reference above figure, devices were mounted on a 15mmx15mm ceramic substrate.

Package Outline Dimensions



SOT23			
Dim	Min	Max	Typ
A	0.37	0.51	0.40
B	1.20	1.40	1.30
C	2.30	2.50	2.40
D	0.89	1.03	0.915
F	0.45	0.60	0.535
G	1.78	2.05	1.83
H	2.80	3.00	2.90
J	0.013	0.10	0.05
K	0.903	1.10	1.00
K1	-	-	0.400
L	0.45	0.61	0.55
M	0.085	0.18	0.11
α	0°	8°	-
All Dimensions in mm			

Suggested Pad Layout



Dimensions	Value (in mm)
Z	2.9
X	0.8
Y	0.9
C	2.0
E	1.35

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