



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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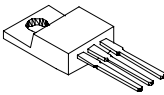
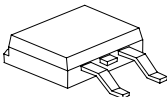
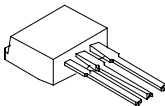
16CTQ150/16CTQ150S /16CTQ150-1 SCHOTTKY RECTIFIER

Applications:

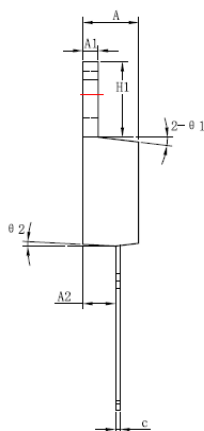
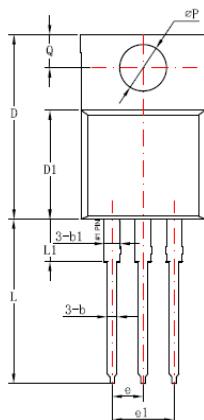
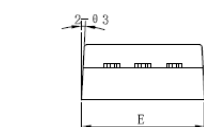
- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection

Features:

- 175°C T_J operation
- Center tap configuration
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

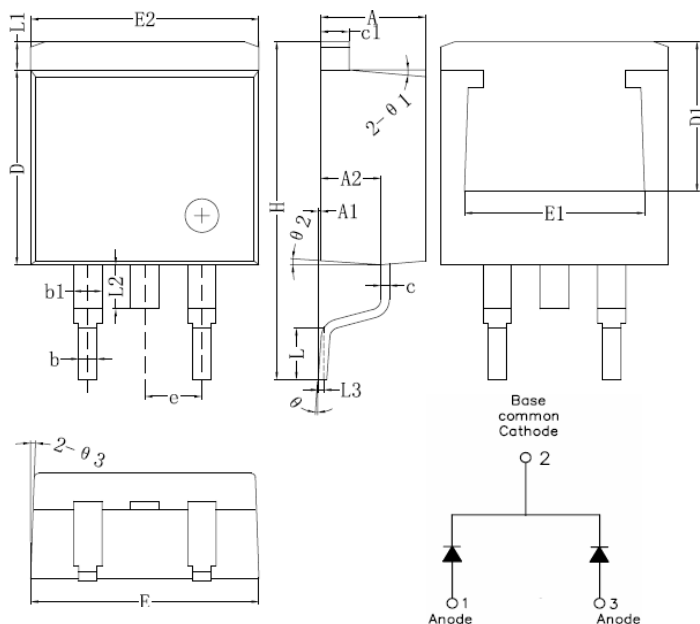
Case styles		
16CTQ150	16CTQ150S	16CTQ150-1
		
TO-220AB	D ² PAK	TO-262

Mechanical Dimensions: In Inches / mm



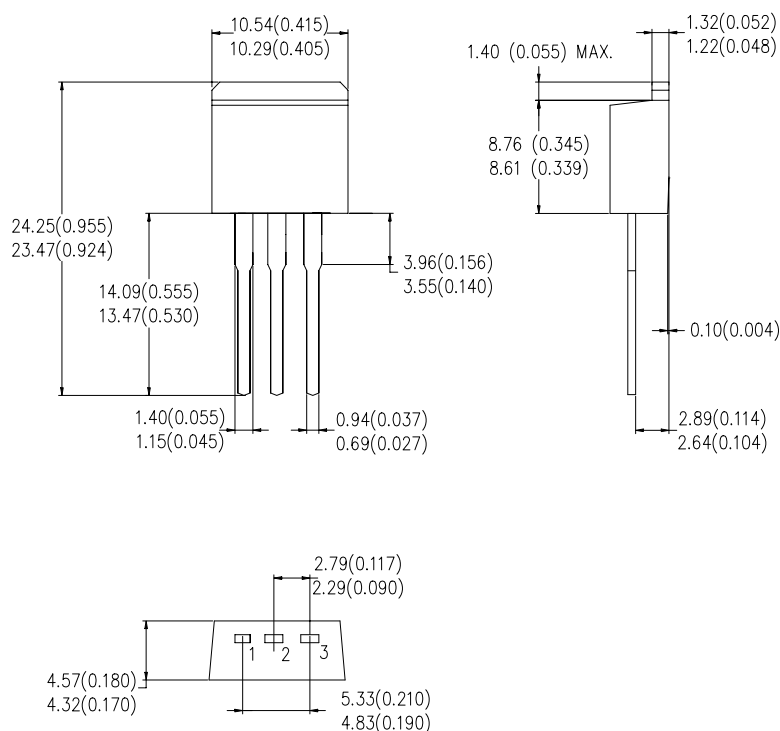
Symbol	Dimensions in millimeters		
	Min	Typical	Max
A	4.42	4.57	4.72
A1	1.17	1.27	1.37
A2	2.59	2.69	2.89
b	0.71	0.81	0.96
b1		1.27	
c	0.36	0.38	0.61
D	14.94	15.24	15.54
D1	8.85	9.00	9.15
E	10.01	10.16	10.31
e		2.54	
e1		5.06	
H1	6.04	6.24	6.44
L	12.7	13.56	13.78
L1		3.5	
ØP	3.74	3.84	4.04
Q	2.54	2.74	2.94
Ø1		7°	
Ø2		3°	
Ø3		4°	

TO-220AB

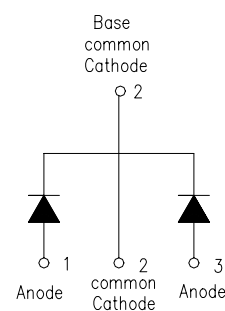


D²PAK

Symbol	Dimensions in millimeters		
	Min.	Typical	Max.
A	4.55	4.70	4.85
A1	0	0.10	0.25
A2	2.59	2.69	2.89
b	0.71	0.81	0.96
b1		1.27	
c	0.36	0.38	0.61
c1	1.17	1.27	1.37
D	8.55	8.70	8.85
D1	6.40		
E	10.01	10.16	10.31
E1	7.6		
E2	9.98	10.08	10.18
e		2.54	
H	14.6	15.1	15.6
L	2.00	2.30	2.70
L1	1.17	1.27	1.40
L2			2.20
L3		0.25BSC	
e	0	-	8°
e1		5°	
e2		4°	
e3		4°	



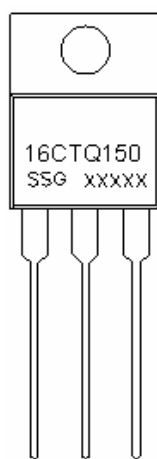
TO-262



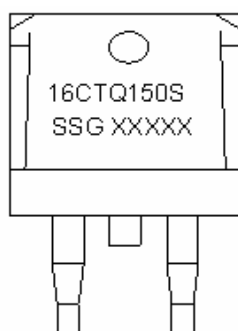
Technical Data
Data Sheet N0667, Rev. -

Green Products

Marking Diagram:



16CTQ150



16CTQ150S

Where XXXXX is YYWWL

16CTQ150 = Part Name
SSG = SSG
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
16CTQ150	TO-220AB (Pb-Free)	50pcs / tube
16CTQ150S	D ² PAK (Pb-Free)	800pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	150	V
Max. Average Forward	$I_{F(AV)}$	50% duty cycle @ $T_C = 154^\circ\text{C}$, rectangular wave form	8(per leg) 16(per device)	A
Max. Peak One Cycle Non-Repetitive Surge Current (per leg)	I_{FSM}	8.3 ms, half Sine pulse	276	A



Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop *	V _{F1}	@ 8A, Pulse, T _J = 25 °C	0.8	V
	V _{F2}	@ 8A, Pulse, T _J = 125 °C	0.66	V
Max. Reverse Current at DC condition	I _{R1}	@V _R = rated V _R T _J = 25 °C	0.55	mA
Max. Reverse Current	I _{R2}	@V _R = rated V _R T _J = 125 °C	7.0	mA
Max. Junction Capacitance	C _T	@V _R = 5V, T _C = 25 °C f _{sig} = 1MHz	500	pF
Typical Series Inductance	L _S	Measured lead to lead 5 mm from package body	8.0	nH
Max. Voltage Rate of Change(Rated V _R)	dv/dt	-	10,000	V/μs

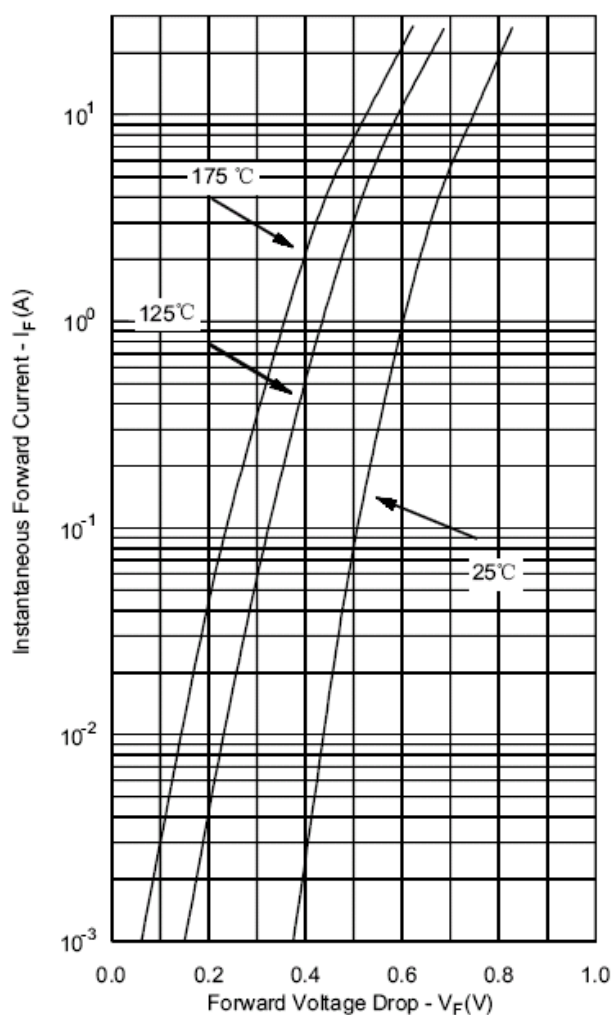
* Pulse Width < 300μs, Duty Cycle <2%

Thermal-Mechanical Specifications:

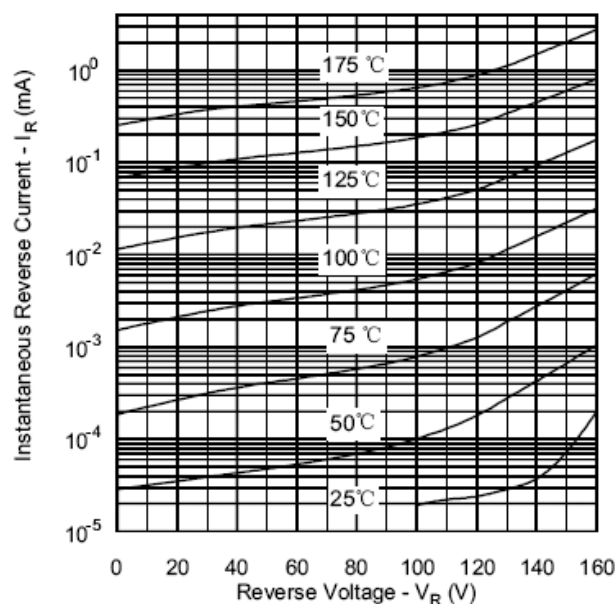
Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	T _J	-	-55 to +175	°C
Max. Storage Temperature	T _{stg}	-	-55 to +175	°C
Maximum Thermal Resistance Junction to Case (per leg)	R _{θJC}	DC operation	3.25	°C/W
Typical Thermal Resistance, case to Heat Sink	R _{θcs}	Mounting surface, smooth and greased	0.50	°C/W
Approximate Weight	wt	-	2	g
Case Style	TO-220AB,D ² PAK,TO-262(Suffix“s”for D ² PAK; Suffix“-1”for TO-262)			



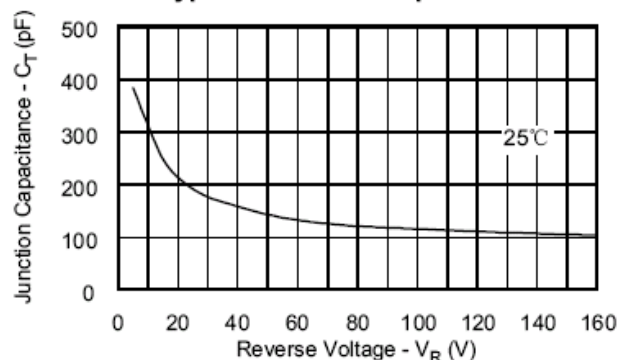
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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