



## 15SQ045 SCHOTTKY BARRIER RECTIFIER

### Applications:

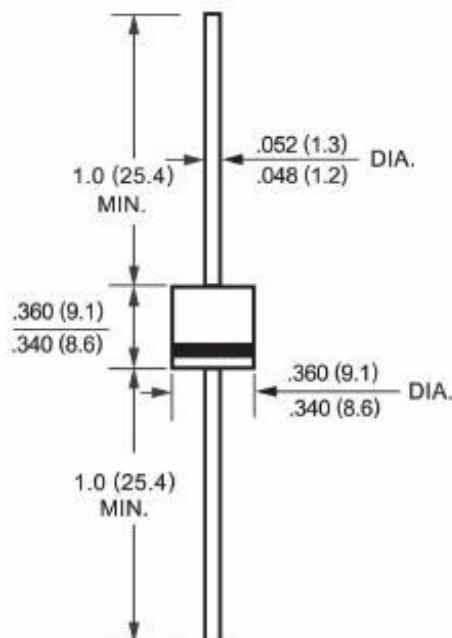
- DC-DC converters
- AC adapter
- High frequency rectification circuit
- Bypass diodes

### Features:

- Super-high speed & low noise switching
- Low voltage drop
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request



### Mechanical Dimensions: In Inches/ mm



R-6



**Marking Diagram:**

Where XXXXX is YYWWL



15SQ045 = Part Name  
SSG = SSG  
YY = Year  
WW = Week  
L = Lot Number

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

**Ordering Information:**

Device	Package	Shipping
15SQ045	R-6 (Pb-Free)	500pcs / 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	$V_{RRM}$	-	45	V
Max. Average Forward	$I_{F(AV)}$	R-load, @ $T_a=50^{\circ}C$	15	A
Max. Peak One Cycle Non-Repetitive Surge Current	$I_{FSM}$	8.3 ms, half Sine pulse	300	A

**Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units	
Max. Forward Voltage Drop	$V_{FM}$	$I_{FM}=15.0A, T_a=25^{\circ}C$	0.55	V	
Max. Reverse Current	$I_{RM1}$	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$	0.5	mA
	$I_{RM2}$		$T_a=100^{\circ}C$	25	
Thermal Resistance(Typical)	$R_{\theta J-c}$	Between junction and case	3.0	$^{\circ}C/W$	
	$R_{\theta J-L}$	Between junction and lead	2.0		

**Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature at reduced reverse voltage at reduced reverse voltage in DC forward mode	$T_J$	$V_R \leq 80\% V_{RRM}$ $V_R \leq 50\% V_{RRM}$	-55 to +150 -55 to +180 -55 to +200	$^{\circ}C$
Max. Storage Temperature	$T_{stg}$	-	-55 to +150	$^{\circ}C$
Approximate Weight	wt	-	2.24	g
Case Style	R-6			

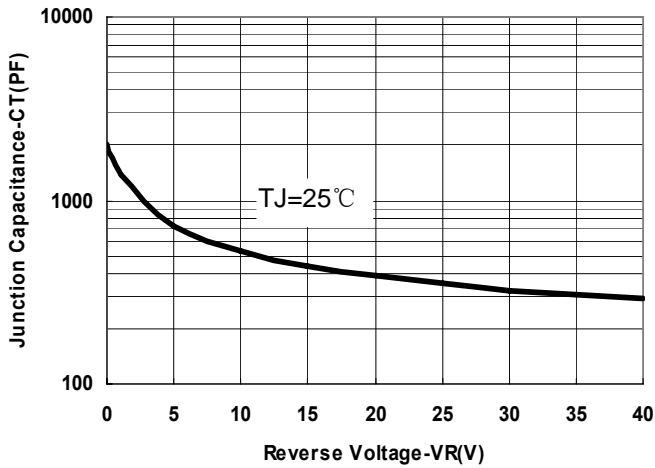


Fig.1-Typical Junction Capacitance Vs.Reverse Voltage

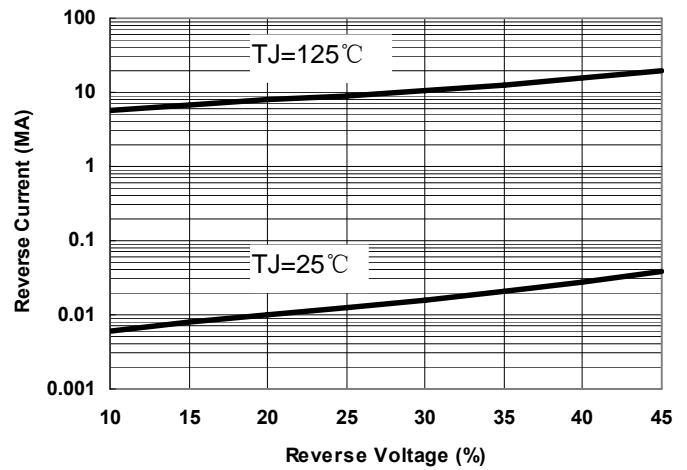


Fig.2-Typical Values Of Reverse Current VS.Reverse Voltage

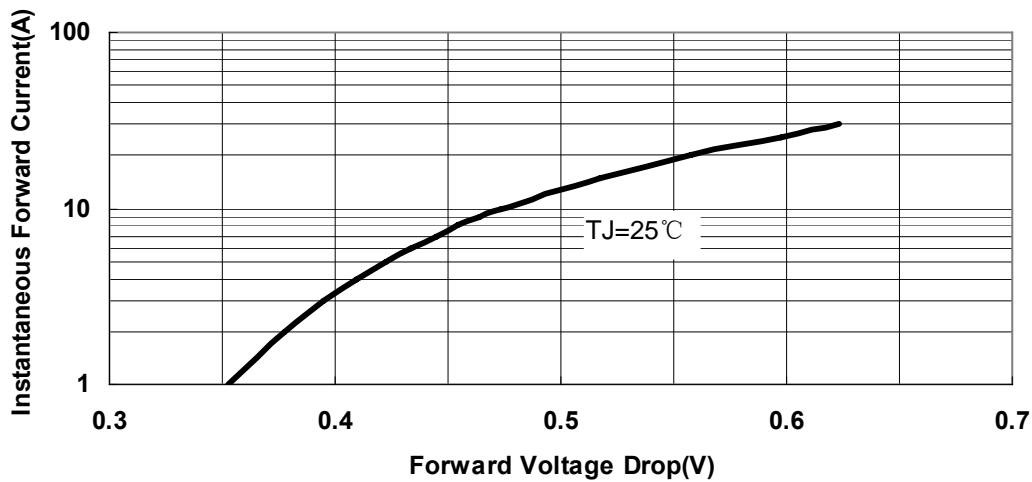


Fig.3-Typical Instantaneous Forward Voltage Characteristics



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