



## 15SQ SERIES SCHOTTKY BARRIER RECTIFIER

### Applications:

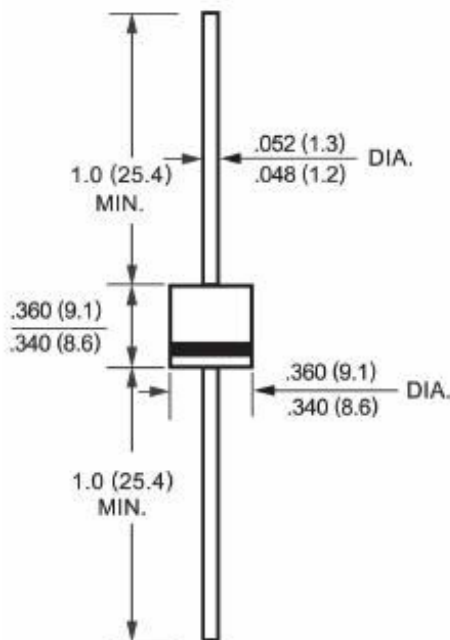
- DC-DC converters
- AC adapter
- High frequency rectification circuit
- Bypass diodes

### 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 XXX is 030/045/050/060/100  
Where XXXXX is YYWWL

- 15 = Forward Current (15A)
- S = Package Type
- Q = Device Type
- XXX = Reverse Voltage (30/45/50/60/100V)
- SSG = SSG
- YY = Year
- WW = Week
- L = Lot Number

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

**Ordering Information:**

Device	Package	Shipping
15SQ030 15SQ045 15SQ050 15SQ060 15SQ100	R-6 (Pb-Free)	500pcs / reel

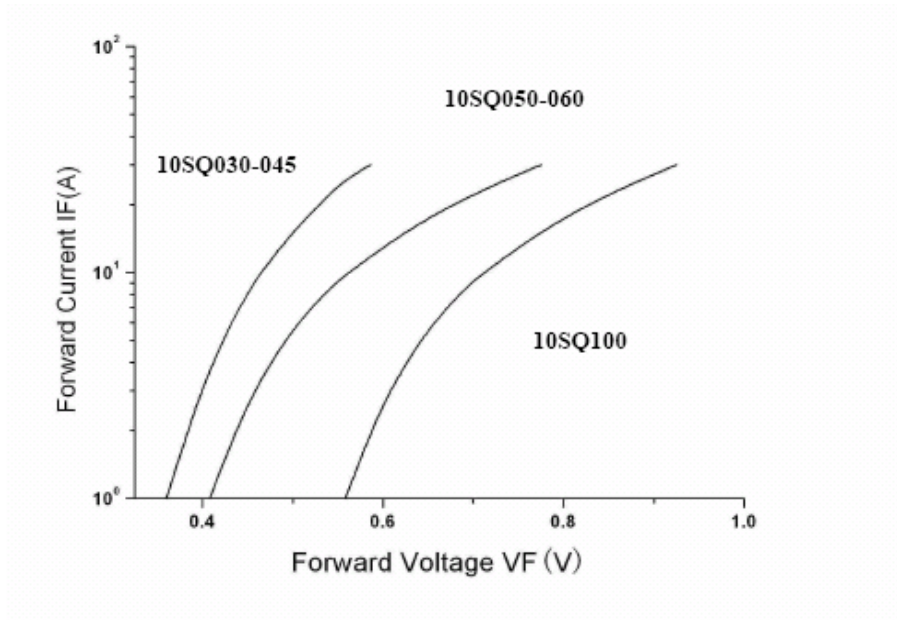
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.



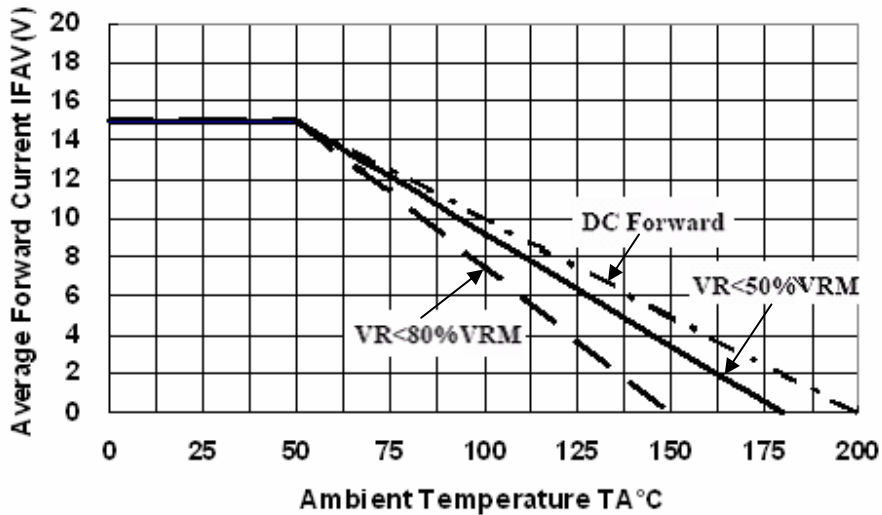
## Maximum ratings

Type	Transient peak reverse voltage $V_{RSM}$ [V] @ half sine-wave	Forward voltage $V_F$ [V] @ $I_F=15A$
15SQ030	30	0.55
15SQ045	45	0.55
15SQ050	50	0.68
15SQ060	60	0.68
15SQ100	100	0.83

Characteristics	Symbol	Value	Unit							
Max. average forward current,R-load @ $T_a=50^{\circ}C$	$I_{FAV}$	15	A							
Peak Repetitive Forward Current 8.3ms single half sine-wave	$I_{FSM}$	<table border="1"> <tr> <td>15SQ030</td> <td rowspan="4">300</td> </tr> <tr> <td>15SQ045</td> </tr> <tr> <td>15SQ050</td> </tr> <tr> <td>15SQ060</td> </tr> <tr> <td>15SQ100</td> <td>340</td> </tr> </table>	15SQ030	300	15SQ045	15SQ050	15SQ060	15SQ100	340	A
15SQ030	300									
15SQ045										
15SQ050										
15SQ060										
15SQ100	340									
Junction temperature at reduced reverse voltage $VR \leq 80\%V_{RRM}$  in DC forward mode $VR \leq 50\% V_{RRM}$	$T_j$	-50...+150 $\leq 180$ $\leq 200$	$^{\circ}C$							
Storage temperature	$T_s$	-50...+150	$^{\circ}C$							
Maximum DC Reverse Current @ $T_a=25^{\circ}C$ , at Rated DC blocking voltage @ $T_a=100^{\circ}C$ ,	$I_R$	<500 <25	$\mu A$ mA							
Thermal resistance junction to case	$R_{thC}$	5	$^{\circ}C/W$							
Thermal resistance junction to leads	$R_{thL}$	2.5	$^{\circ}C/W$							
Approximate Weight	wt	2.24	g							



**Typical Forward Characteristics**



**Current Derating**



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