

### Thermal-Mechanical Specifications

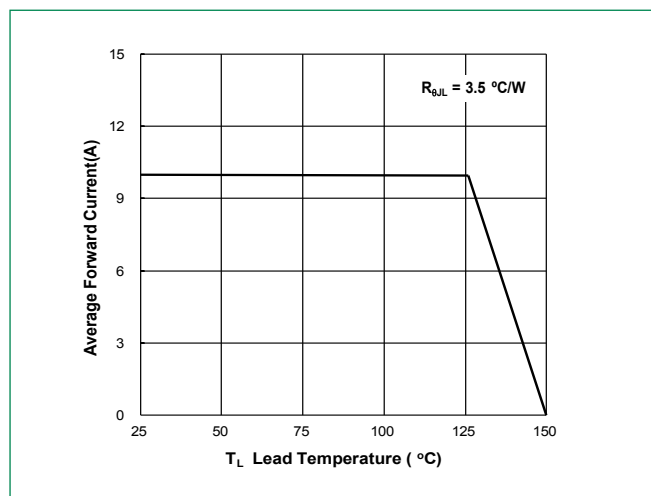
Parameters	Symbol	Test Conditions	Max	Unit
Junction Temperature	$T_J$	-	-55 to +150	°C
Storage Temperature	$T_{stg}$	-	-55 to +150	°C
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	DC operation	75	°C/W
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}^*$	DC operation	3.5	°C/W
Approximate Weight	wt	-	0.08	g
Case Style	TO-277B			

(1) Free air, mounted on recommended copper pad area; thermal resistance  $R_{\theta JA}$  - junction to ambient

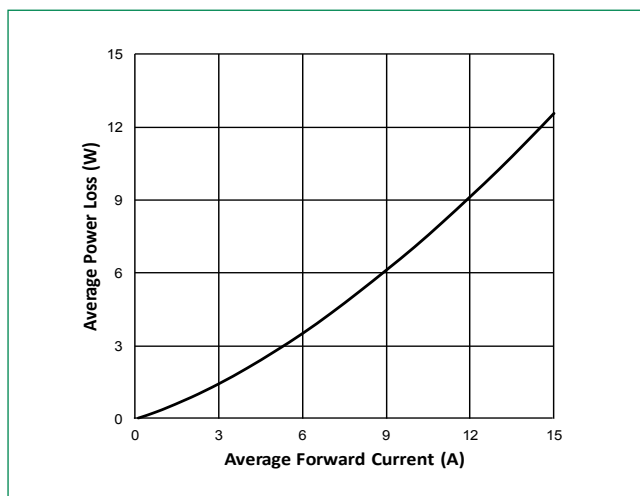
(2) Mounted on 30 mm x 30 mm pad areas aluminum PCB; thermal resistance  $R_{\theta JL}$  - junction to lead

\*Lead temperature monitored at the cathode pin

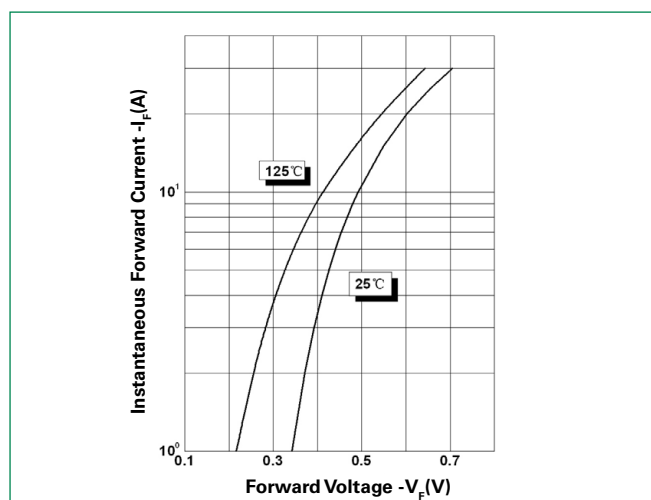
**Figure 1: Forward Current Derating Curve**



**Figure 2: Forward Power Loss Characteristics**



**Figure 3: Typical Instantaneous Forward Voltage Characteristics**



**Figure 4: Typical Reverse Characteristics**

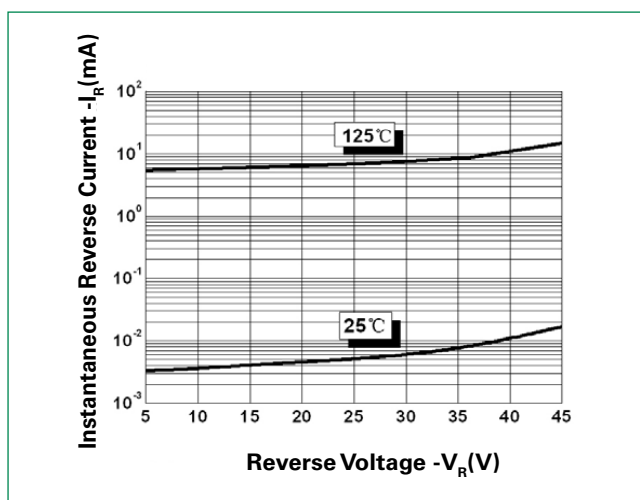
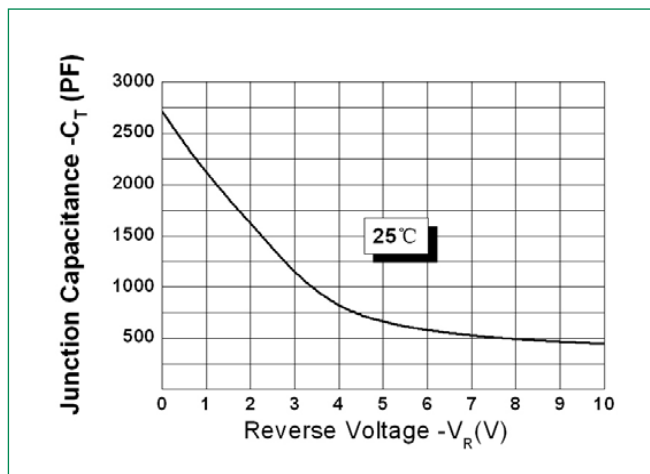
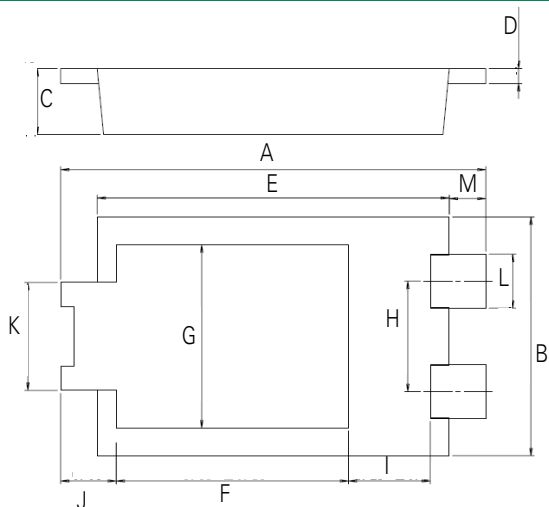


Figure 5: Typical Junction Capacitance

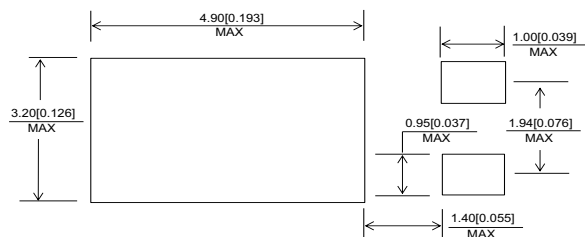


Dimensions-TO-277B

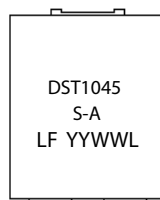


Symbol	Millimeters		
	Min	Typ	Max
A	6.30	6.50	6.70
B	3.88	3.98	4.08
C	0.95	1.10	1.25
D	0.20	0.25	0.30
E	5.28	5.38	5.48
F	3.40	3.55	3.70
G	2.90	3.05	3.20
H	1.74	1.84	1.94
I	1.10	1.25	1.40
J	-	0.85	-
K	1.70	1.80	1.90
L	0.85	0.90	0.95
M	-	0.56	-

Mounting Pad Layout



Part Numbering and Marking System



DST = Component Type  
 10 = Forward Current (10A)  
 45 = Reverse Voltage (45V)  
 S = Package Type  
 A = AEC-Q101 Qualified Component  
 LF = Littelfuse  
 YY = Year  
 WW = Week  
 L = Lot Number

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