

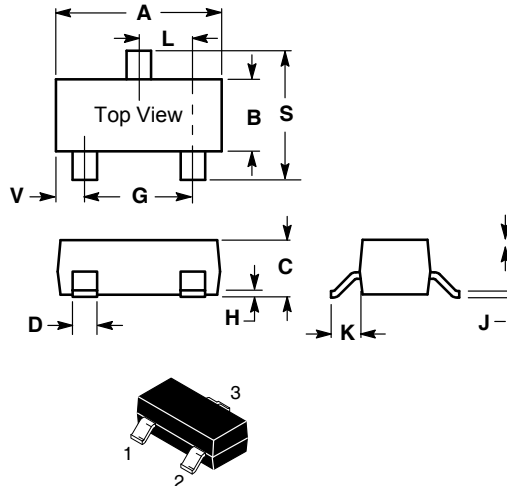
A suffix of "-C" specifies halogen & lead-free

FEATURES

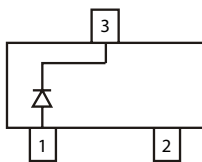
- RoHS Compliant Product
- High Reverse Breakdown Voltage
- Ultra high speed Switching
- High Conductance

MECHANICAL DATA

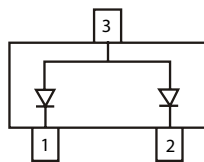
Case: SC59, Molded Plastic
Terminals: Solderable per MIL-STD-202, Method 208
Polarity: See Diagrams Below
Weight: 0.008 grams (approx.)
Mounting Position: Any



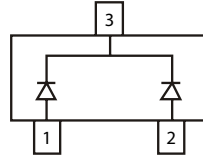
SC-59		
Dim	Min	Max
A	2.700	3.100
B	1.400	1.600
C	1.000	1.400
D	0.350	0.500
G	1.800	2.000
H	0.000	0.100
J	0.085	0.177
K	0.400	0.600
L	0.850	1.150
S	2.400	2.800
V	0.450	0.550
All Dimension in mm		



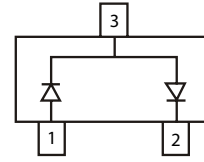
MMBD318 Marking: LD6



MMBD318A Marking: LD7



MMBD318C Marking: LD8



MMBD318S Marking: LD9

Absolute Maximum Ratings ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Ratings	Unit
Max.Repetitive Peak Reverse Voltage	V_{RRM}	350	V
Max.RMS Voltage	V_{RMS}	212	V
Max. DC Blocking Voltage	V_{DC}	300	V
Max. Average Forward Rectified Current	I_O	225	mA
Typical Junction Capacitance between Terminal (Note 1)	C_j	5.0	pF
Max. Reverse Recovery Time (Note2)	T_{rr}	50	ns
Non-Repetive Peak Forward surge Current @ $T_p=1.0\mu\text{s}$ @ $T_p= 1.0\text{s}$	I_{FSM}	4 1	A
Power Dissipation	P_D	350	mW
Thermal Resistance Junction to Ambient Air	R_{JA}	357	$^\circ\text{C}/\text{W}$
Operation and Storage Temperature Range	T_j, T_{STG}	-60~+150	$^\circ\text{C}$

Electrical Characteristics (AT $T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristics	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage. $I_R=150\mu\text{A}$	V_R	350	-	V
Average Reverse Current. $V_R=240\text{V}, T_A=25^\circ\text{C}$	I_R	-	100	nA
$V_R=240\text{V}, T_A=150^\circ\text{C}$		-	100	μA
Forward Voltage	V_F	-	1.0	V

- Note: 1. Measured at 1.0 MHz and applied reverse of 0 voltage
2. Measured at applied forward current of 30mA, $R_L=100\Omega$ and recovery to $I_{RR}=-3\text{mA}$
3. ESD sensitive product handling required.

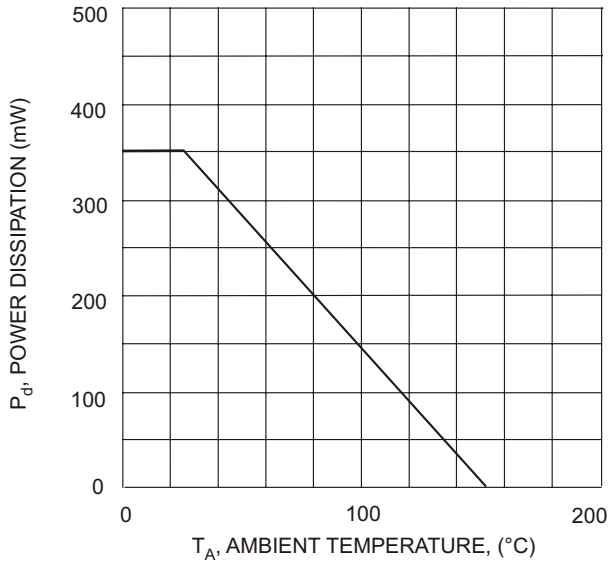


Fig. 1 Power Derating Curve, total package

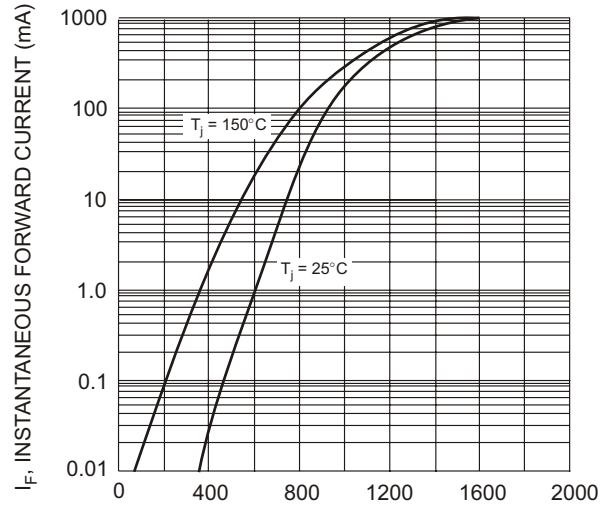


Fig. 2 Typical Forward Characteristics, per element

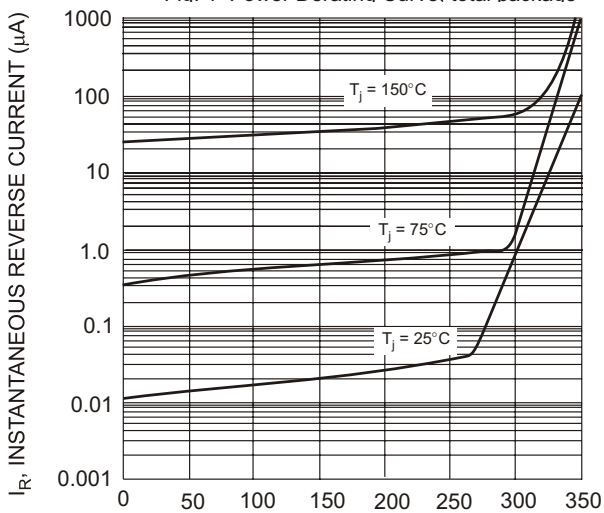


Fig. 3 Typical Reverse Characteristics, per element

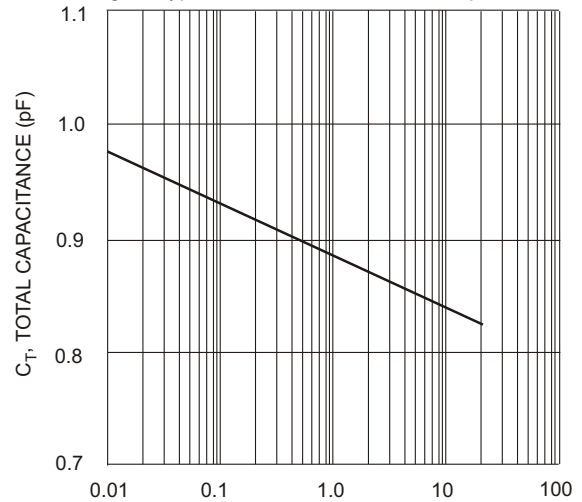


Fig. 4 Typical Total Capacitance vs. Reverse Voltage, per element