Elektronische Bauelemente

SBL30U60D

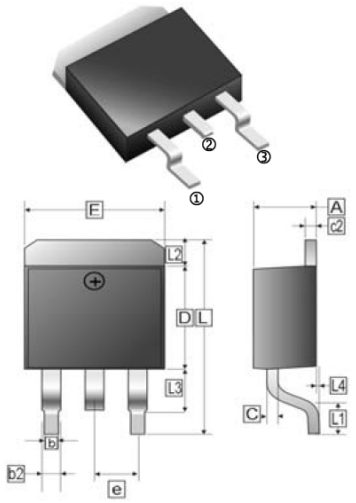
Voltage 60V,30 Amp

Low VF Planar MOS Barrier Schottky Rectifier

RoHS Compliant Product

A suffix of "-C" specifies halogen free

TO-263(D^2-PACK)



FEATURES

- Planar MOS Schottky technology
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

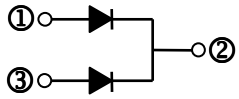
MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.00	4.87	c2	1.07	1.65
b	0.51	1.01	b2	1.34 REF	
L4	0.00	0.30	D	8.0	9.65
C	0.30	0.74	e	2.54 REF	
L3	1.50 REF		L	14.6	16.1
L1	2.5 REF		L2	1.27 REF	
E	9.60	10.67			

PACKAGE INFORMATION

Package	MPQ	Leader Size
TO-263	0.8K	13 inch



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

Parameter		Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	60	V
Working Peak Reverse Voltage		V_{RSM}	60	V
Maximum DC Blocking Voltage		V_{DC}	60	V
Maximum Average Forward Rectified Current	(Per Leg)	I_F	15	A
	(Per Device)		30	
Peak Forward Surge Current, 8.3 ms single half sine-wave		I_{FSM}	250	A
Voltage Rate of Chance (Rated V_R)		dv/dt	10000	V / μs
Typical Thermal Resistance		$R_{\theta JC}$	3	°C /W
Operating and Storage Temperature Range		T_J,T_{STG}	-40~150	°C

ELECTRICAL CHARACTERISTICS

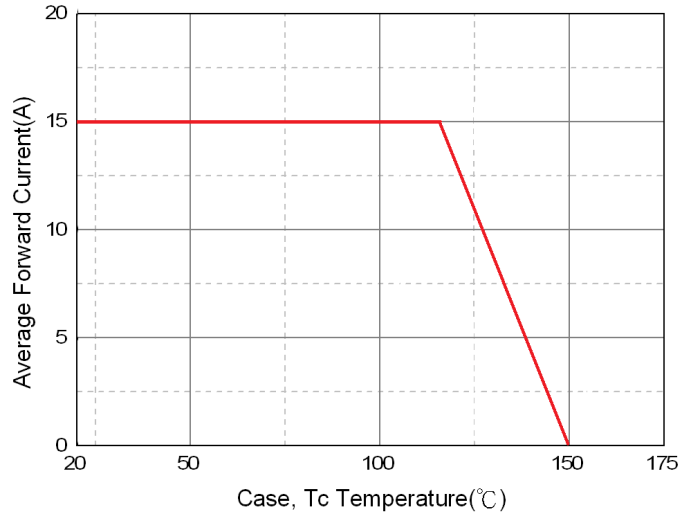
Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Maximum Instantaneous Forward Voltage	V_F	0.37	0.39	V	I_F = 3A, T_J = 25°C
		0.41	0.46		I_F = 5A, T_J = 25°C
		0.49	0.53		I_F = 10A, T_J = 25°C
		0.58	0.61		I_F = 15A, T_J = 25°C
		0.56	-		I_F = 15A, T_J = 125°C
Maximum DC Reverse Current at Rated DC Blocking Voltage [2]	I_R	-	0.5	mA	T_J=25°C
		-	20		T_J=100°C
Typical Junction Capacitance [1]	C_J	520	-	pF	

NOTES:

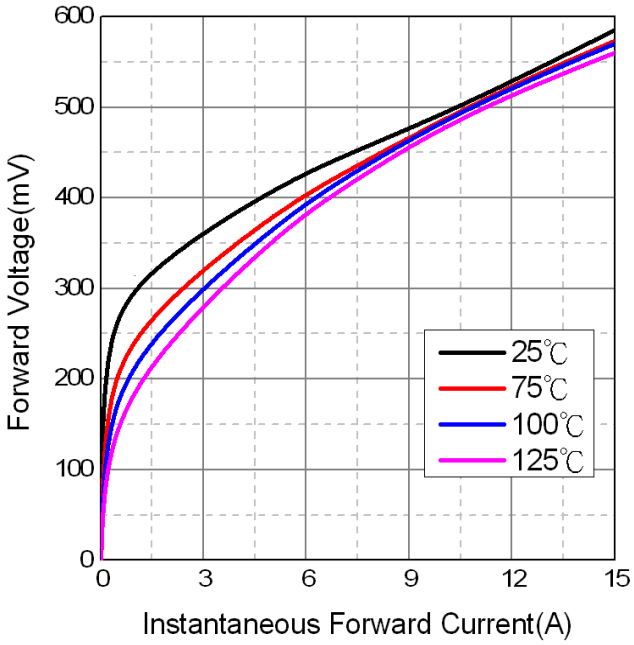
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test：Pulse Width = 300 μs, Duty Cycle ≦ 2.0%.

RATINGS AND CHARACTERISTIC CURVES

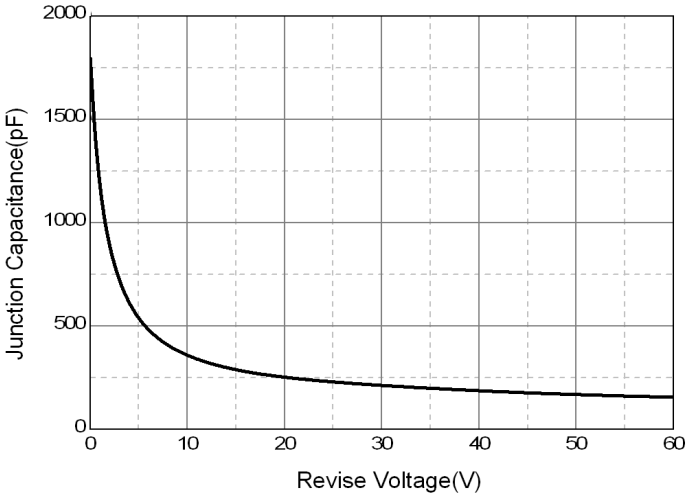
Typical Forward Current Derating Curve



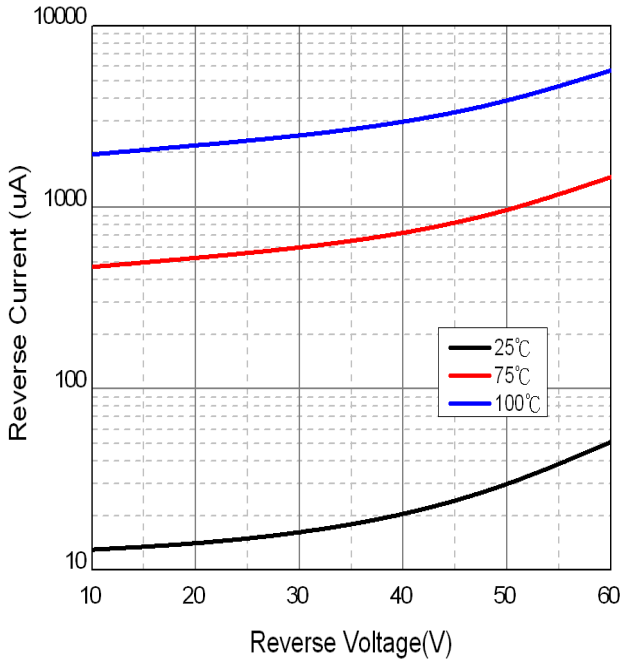
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current