

RoHS Compliant Product  
A suffix of "-C" specifies halogen free

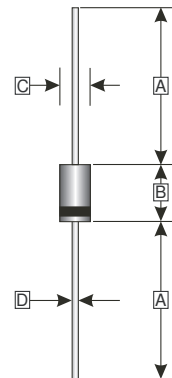
### FEATURES

- 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

**DO-27**



REF.	Millimeter	
	Min.	Max.
A	25.4 (TYP)	
B	7.20	9.50
C	4.80	5.60
D	0.96	1.32

### 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	$I_F$	5	A
Peak Forward Surge Current, 8.3 ms single half sine-wave	$I_{FSM}$	80	A
Voltage Rate of Change (Rated $V_R$ )	dv/dt	10000	V / $\mu$ s
Typical Thermal Resistance	$R_{\theta JC}$	15	$^{\circ}C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-40~150	$^{\circ}C$

### ELECTRICAL CHARACTERISTICS

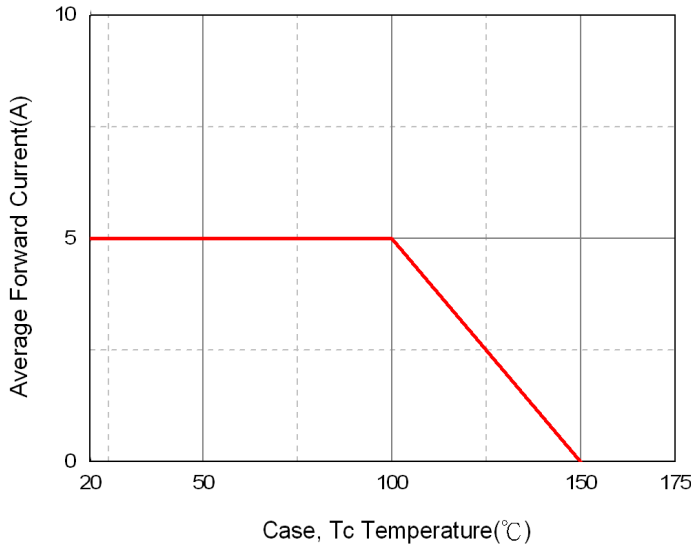
Parameter	Symbol	Typ.	Max.	Unit	Test Condition
Maximum Instantaneous Forward Voltage	$V_F$	0.45	0.49	V	$I_F = 3A, T_J = 25^{\circ}C$
		0.56	0.59		$I_F = 5A, T_J = 25^{\circ}C$
		0.54	0.58		$I_F = 5A, T_J = 125^{\circ}C$
Maximum DC Reverse Current at Rated DC Blocking Voltage <sup>2</sup>	$I_R$	-	0.2	mA	$T_J = 25^{\circ}C$
		-	20		$T_J = 100^{\circ}C$
Typical Junction Capacitance <sup>1</sup>	$C_J$	180	-	pF	

**NOTES:**

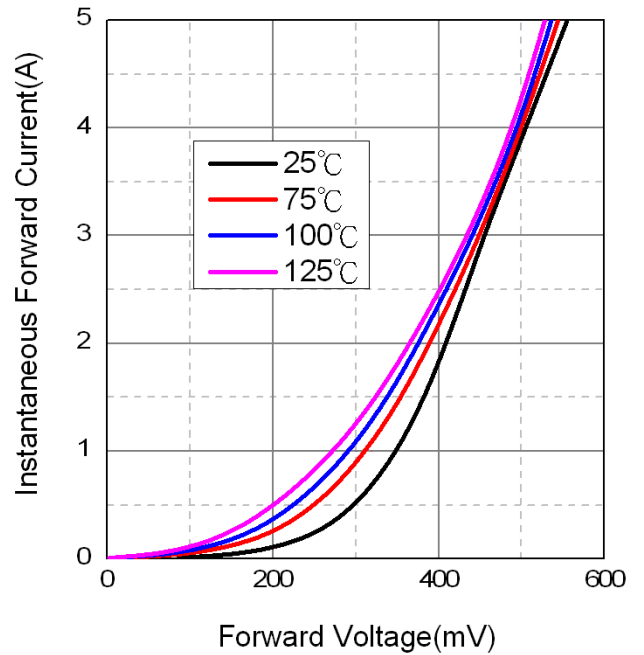
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test : Pulse Width = 300  $\mu$ s, Duty Cycle  $\leq$  2.0%.

**RATINGS AND CHARACTERISTIC CURVES**

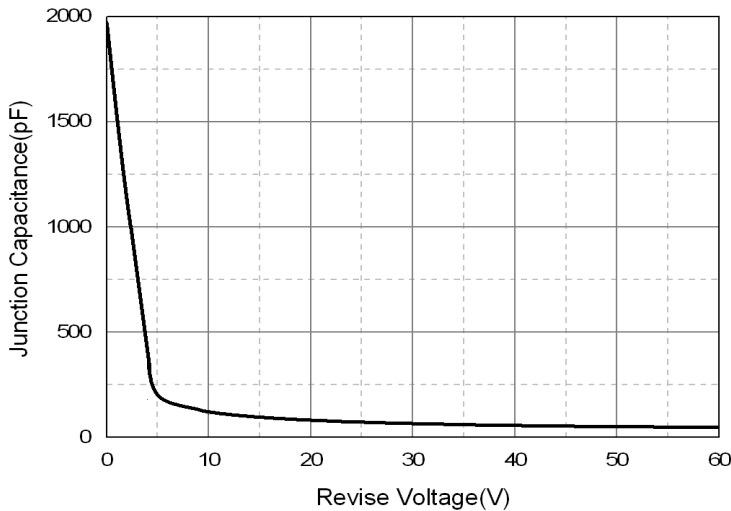
Typical Forward Current Derating Curve



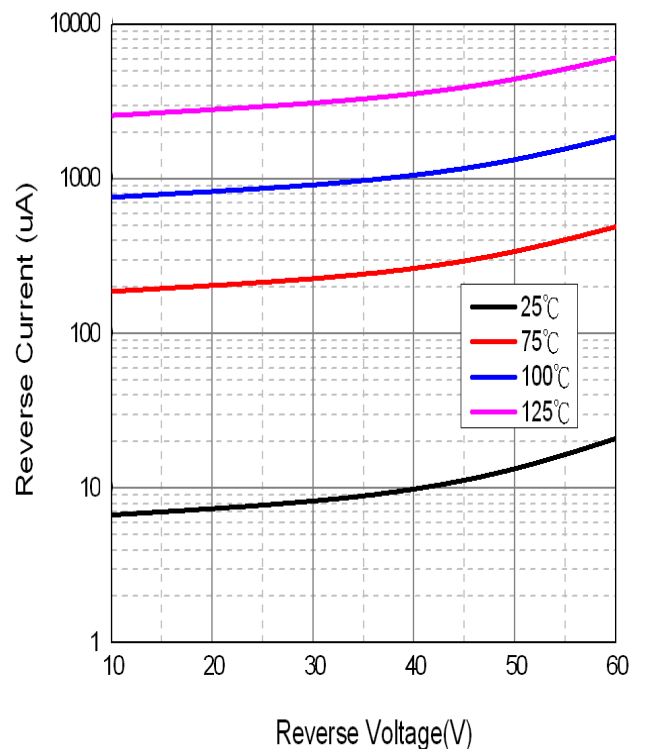
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

