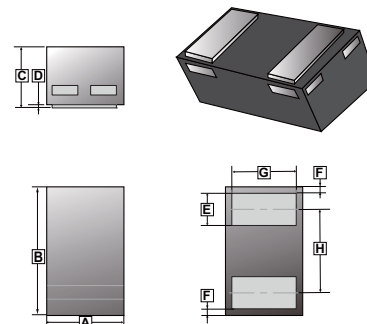


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

DFN1006-2

## FEATURES

- Low turn-on voltage
- Fast switching
- PN junction guard for transient and ESD protection
- Designed for surface mount application
- Plastic material-UL recognition flammability classification 94V-O



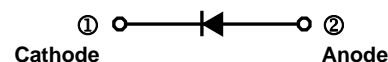
## APPLICATION

- Surface mount fast switching diode

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.55	0.675	E	0.20	0.30
B	0.95	1.075	F	0.05REF	
C	0.47	0.53	G	0.45	0.55
D	0	0.05	H	0.65TYP	

## PACKAGE INFORMATION

Product	Marking Code
SCS0240DF	43



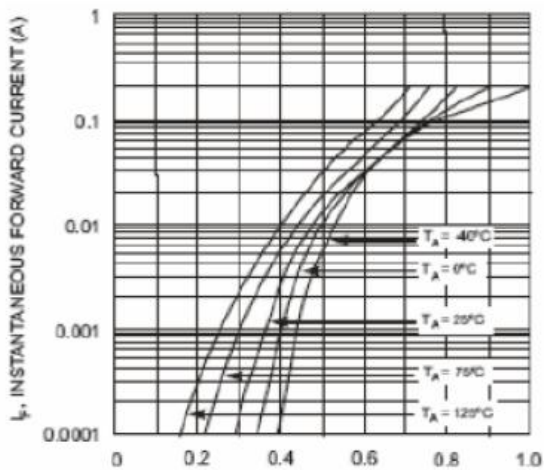
## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (Single diode at $T_A = 25^\circ\text{C}$ )

Parameter	Symbol	Limits	Unit
Peak repetitive peak reverse voltage	$V_{RRM}$	40	V
Working peak reverse voltage	$V_{RWM}$	40	V
DC reverse voltage	$V_R$	40	V
Forward continuous current	$I_F$	200	mA
Peak forward surge current @ < 1.0 s	$I_{FSM}$	600	mA
Power Dissipation	$P_d$	200	mW
Thermal resistance junction to ambient	$R_{\theta JA}$	625	$^\circ\text{C} / \text{W}$
Junction, Storage Temperature Range	$T_J, T_{STG}$	-55 ~ +125	$^\circ\text{C}$

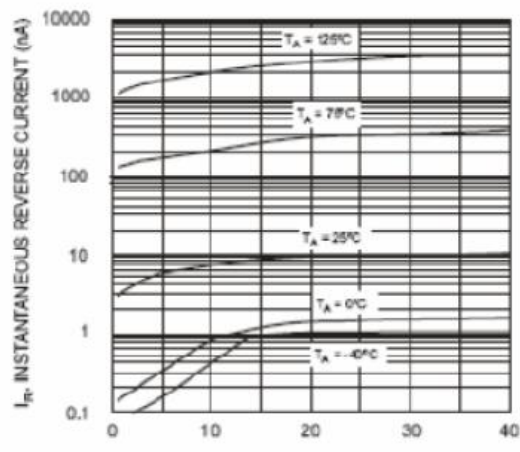
## ELECTRICAL CHARACTERISTICS (at $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	40	-	-	V	$I_R = 10\mu\text{A}$
Forward Voltage	$V_F$	-	-	0.38	V	$I_F = 1.0\text{mA}$
		-	-	0.5		$I_F = 10\text{mA}$
		-	-	1.0		$I_F = 40\text{mA}$
		-	-	-		-
Reverse Current	$I_R$	-	20	200	nA	$V_R = 30\text{V}$
Capacitance between terminals	$C_T$	-	4	5	pF	$V_R = 0\text{V}, f = 1.0\text{MHz}$
Reverse Recovery Time	$T_{RR}$	-	-	5	ns	$I_F = I_R = 10\text{mA}, R_L = 100\Omega$

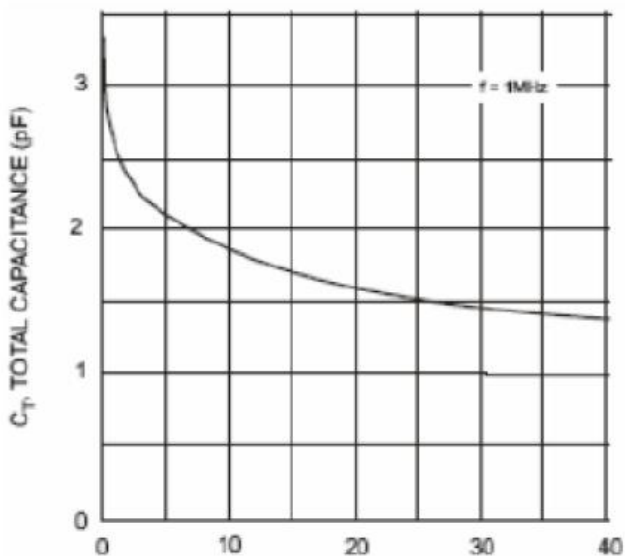
**RATINGS AND CHARACTERISTIC CURVES**



$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 1 Typical Forward Voltage



$V_R$ , INSTANTANEOUS REVERSE VOLTAGE (V)  
Fig. 2 Typical Reverse Characteristics



$V_R$ , REVERSE VOLTAGE (V)  
Fig. 3 Typical Capacitance