

12 AMP SCHOTTKY BARRIER RECTIFIERS

FEATURES

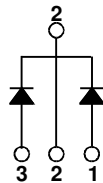
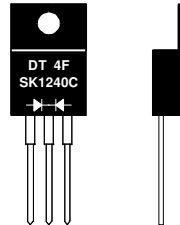
- Low switching noise
- Low forward voltage drop
- Low thermal resistance
- High switching capability
- High surge capability
- High reliability

MECHANICAL DATA

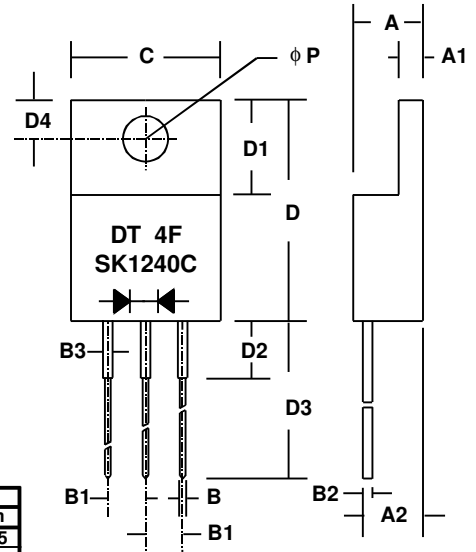
- Case: TO-220 molded plastic (Fully Insulated) (U/L Flammability Rating 94V-0)
- Terminals: Rectangular pins w/ standoff
- Solderability: Per MIL-STD 202 Method 208 guaranteed
- Polarity: Diode depicted on product
- Mounting Position: Any
- Weight: 0.06 Ounces (1.75 Grams)

MECHANICAL SPECIFICATION

ACTUAL SIZE OF TO-220AB PACKAGE



FULLY INSULATED PACKAGE



Sym	Minimum		Maximum	
	in	mm	in	mm
A			0.187	4.75
A1	0.055*	1.4*		
A2	0.14*	3.56*		
B	0.035	0.9	0.043	1.1
B1	0.09	2.3	0.102	2.6
B2	0.028*	0.66*		
B3	0.051*	1.3*		
C			0.410	10.4
D	0.59	15.0	0.61	15.5
D1	0.25*	6.4*		
D2			0.16	4.0
D3	0.53	13.5	0.57	14.8
D4	0.108*	2.75*		
phi P	0.141*	3.58*		

* These dimensions are "Typicals".

ITO-220AB

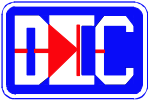
SERIES SK1240C - SK12100C

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive loads, derate current by 20%.

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS					UNITS
		SK 1240C	SK 1250C	SK 1260C	SK 1270C	SK 12100C	
Series Number							
Maximum DC Blocking Voltage	VRM						VOLTS
Maximum RMS Voltage	VRMS	40	50	60	70	100	
Maximum Peak Recurrent Reverse Voltage	VRRM						
Average Forward Rectified Current @ Tc = 100 °C	Io	12					AMPS
Peak Forward Surge Current (8.3mS single half sine wave superimposed on rated load)	IFSM	120					
Maximum Forward Voltage Drop (per diode) at 6 Amps DC	VFM	0.55		0.65		0.85	VOLTS
Maximum Average DC Reverse Current At Rated DC Blocking Voltage @ Tj = 25 °C @ Tj = 100 °C	IRM	0.5 50			0.2 10		mA
Typical Thermal Resistance, Junction to Case (on heat sink)	RthetaJC	2.5					°C/W
Junction Operating Temperature Range	TJ	-65 to +150					°C
Storage Temperature Range	TSTG	-65 to +175					

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RATING & CHARACTERISTIC CURVES FOR SERIES SK1240C - SK12100C

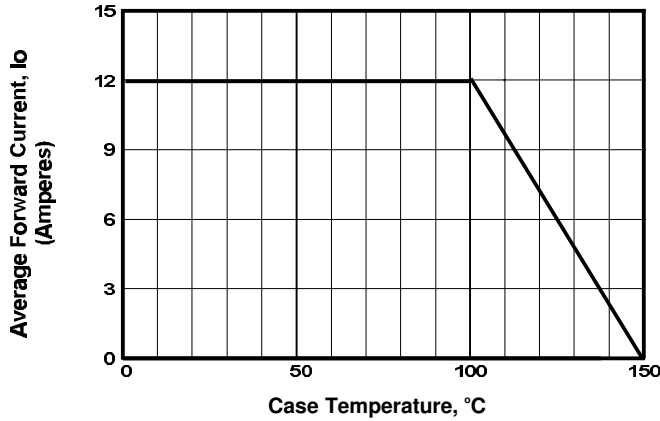


FIGURE 1. FORWARD CURRENT DERATING CURVE

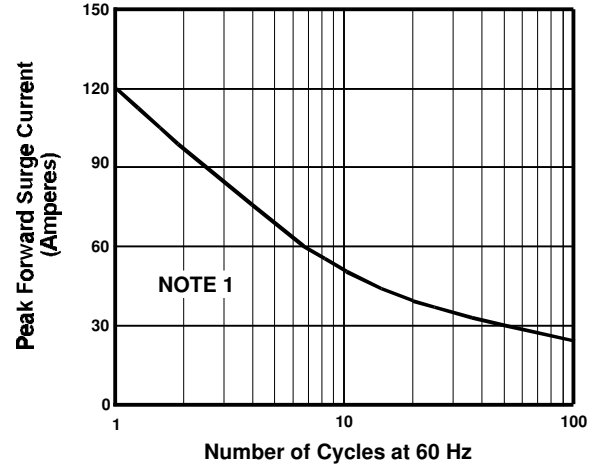


FIGURE 2. MAXIMUM NON-REPETITIVE SURGE CURRENT

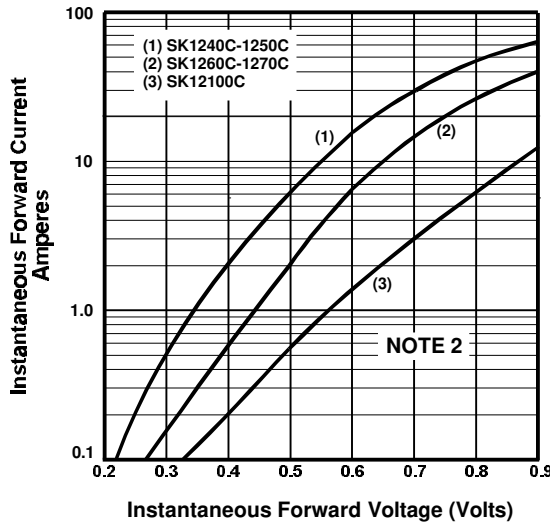


FIGURE 3. TYPICAL FORWARD CHARACTERISTICS

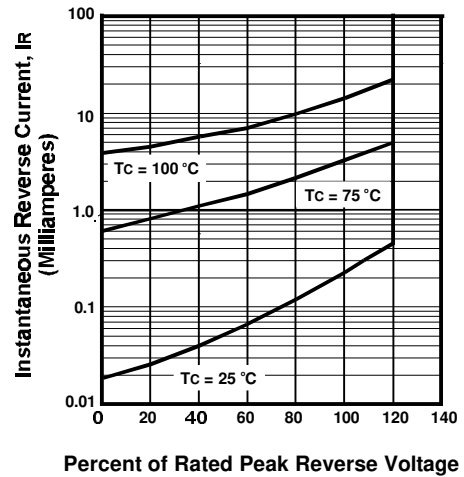


FIGURE 4. TYPICAL REVERSE CHARACTERISTICS

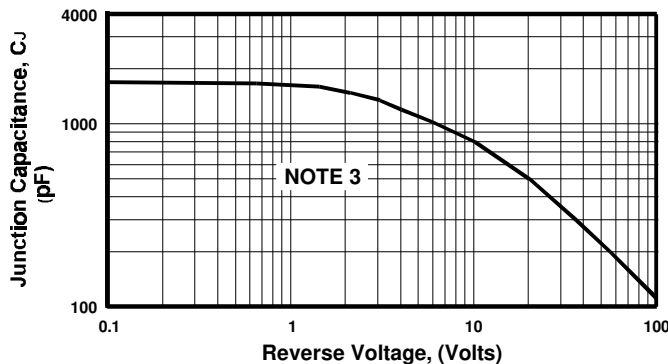


FIGURE 5. TYPICAL JUNCTION CAPACITANCE

NOTES

- (1) JEDEC Method, 8.3 mSec. Single Half Sine Wave
- (2) T_J = 25 °C, Pulse Width = 300 μSec, 2.0% Duty Cycle
- (3) T_c = 25 °C, f = 1.0 MHz, V_{SIG} = 50 mV P-P