

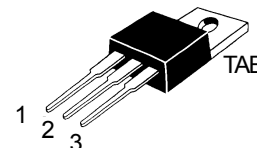
Switchable Current Regulators

IXCP10M90S
IXCY10M90S

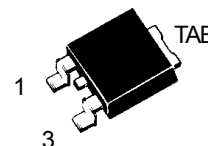
$V_{AK} = 900\text{ V}$
 $I_{A(P)} = 1 - 100\text{ mA}$
 $R_{DYN} = 100\text{ k}\Omega$

Symbol	Test Condition	Maximum Ratings	
V_{AKR}	$T_J = 25^\circ\text{C to } 150^\circ\text{C}$	900	V
V_{AGR}	$T_J = 25^\circ\text{C to } 150^\circ\text{C}$	900	V
V_{GK}		± 20	V
I_D	$T_C = 25^\circ\text{C}$	-0.3	A
P_D	$T_C = 25^\circ\text{C}$	40	W
T_J		-55 ... +150	$^\circ\text{C}$
T_{stg}		-55 ... +150	$^\circ\text{C}$
T_L	Temperature for Soldering (max. 10 s)	260	$^\circ\text{C}$
M_D	Mounting torque with screw M3 (TO-220) with screw M3.5 (TO-220)	0.45/4 0.55/5	Nm/lb.in.

**TO-220 AB
(IXCP)**



**TO-252 AA
(IXCY)**



Pin connections

1 = Gate(G), Control terminal;
2 and tab = A (+) Positive terminal
3 = K (-), Negative terminal

Features

- Minimum of 900 V breakdown
- Resistor programmable current source
- 40 W continuous dissipation
- International standard packages JEDEC TO-220 and TO-252
- On/Off switchable current source

Applications

- Highly stable voltage sources
- Current surge limiters
- Transient voltage protection
- Instantaneously reacting resettable fuses
- Soft start-up circuits

Symbol	Test Condition	Characteristic Values ($T_J = 25^\circ\text{C}$ unless otherwise specified)		
		min.	typ.	max.
V_{AKR}	$R_K = 300\ \Omega$, (Fig. 1)	900		V
$I_{A(P)}$	$V_D = 10\text{ V}$; $R_K = 300\ \Omega$; (Fig. 2)	7	9	15 mA
$V_{GK(off)}$	$I_D = 100\ \mu\text{A}$; $V_D = 900\text{ V}$ Fig. 4	-5		V
$I_{D(P)}$	$V_D = 720\text{ V}$; $V_{GK} = -10\text{ V}$ (Fig. 1)			25 μA
$\Delta V_{AK} / \Delta I_{A(P)}$	Dynamic resistance; $V_D = 10\text{ V}$ $R_K = 300\ \Omega$; (Fig. 1)	100		k Ω
R_{thJC}	Thermal Resistance junction-to-case			3.1 K/W
R_{thJA}	Thermal Resistance junction-to-ambient			80 K/W TO-220 100 K/W TO-252